Foreword

The 6th International Congress on Ambulatory Surgery in Seville, Spain, on April 24–27, 2005, was organized by the Spanish Association of Major Ambulatory Surgery (ASECMA) under the auspices of the International Association for Ambulatory Surgery (IAAS). The Congress takes place in conjunction with the 7th Spanish National Congress.

The scientific programme consists of three plenary sessions, eleven parallel sessions, the Nicoll Memorial Lecture and the opening and closing lectures. The programme also features a number of workshops, satellite symposia and meet-the-expert sessions. However, of prime importance is the contribution of delegates to the free papers and poster sessions. The various papers presented are focused on different topics such as anaesthesia, management, nursing, quality and surgery. The Congress provides the opportunity to share the latest achievements and will be the stimulus for very interesting and creative discussions.

More than 300 papers (oral and poster) have been accepted for presentation (in English and Spanish) at the Congress. Many of these contributions present new insights and/or extend and improve the current knowledge. All submitted manuscripts have been reviewed by members of the Scientific Committee, and evaluated according to a standard scientific grading (a new concept contributing to the advancement of ambulatory surgery, originality of research, validity, reliability and applicability). This Supplement of *Ambulatory Surgery* contains only papers presented in English. Papers in English and Spanish language will be published in a special Supplement of the Spanish national journal *Revista CMA*. While we have made every effort to achieve uniformity in style, the presented results and the final form of the manuscript remain the sole responsibility of the presenting authors. Authors of selected contributed oral and poster presentations have been given the opportunity to submit a manuscript for publication in the journal *Ambulatory Surgery*. I would like to express my gratitude to the members of the Scientific Committee who have offered their time, effort and expertise for the improvement of the quality of the papers. I also extend my thanks to Elsevier for their help on manuscript formatting.

Dr. Juan Marin
Congress President
Day Surgery Unit, Hospital Universitario Valme, Seville, Spain
e-mail address: juan.marin.sspa@juntadeandalucia.es
Tel/fax: +34 95 5016146

1. Anaesthesia

Oral presentations

1 A prospective, randomised controlled study examining binaural beat audio and preoperative anxiety in patients undergoing general anaesthesia for day case surgery

A. George, R. Padmanabhan, P.O. Svanberg, A. Hildreth, D. Laws. *Sunderland Royal Hospital, UK*

Preoperative anxiety is common and often significant prior to surgery. Ambulatory surgery challenges our preoperative goal of an anxiety-free patient by requiring individuals to be 'street ready' within a brief period of time after surgery. Recently, it has been demonstrated that music can be successfully employed to relieve patient anxiety prior to surgical procedures [1], and that audio embedded with tones that create binaural beats within the brain of the listener reduces subjective anxiety levels in patients with chronic anxiety states [2]. We explored anxiety reduction in the preoperative setting according to the State-Trait Anxiety Inventory questionnaire by comparing binaural beat audio (Group 1) with an identical soundtrack but without these added tones (Group 2), and against a third group, representing standard practice, who received no specific intervention (Group 3). Based on previous studies, a sample size of 34 in each group was required to detect a decrease of 20% in anxiety according to STAI-S scores to provide a power of 90% with a 0.05 two-sided significance level. Mean (±95%CI) reduction in anxiety scores were 26.3% (19.4–33.2) for Group 1 (n=35), compared to 11.1% (6.1–16.1) in Group 2 (n=34) and 3.8% (0.2–7.4) in Group 3 (n=35). Binaural beat audio significantly reduces acute pre-operative anxiety compared to either no intervention or audio alone.

References

[1] Wang SM, Kulkarni L, Dolev J, Kain ZN. Music and preoperative anxiety: a randomized, controlled study. Anesthesia and Analgesia 2002; 94: 1489–94.
[2] Le Scouarnec RP, Poirier RM, Owens JE, Gauthier J, Taylor AG, Foresman PA. Use of binaural beat tapes for treatment of anxiety: a pilot study of tape preference and outcomes. Alternative Therapies in Health and Medicine 2001; 7: 58–63.

2 Peri-operative fluids and PONV in patients undergoing day surgery: An audit report

B. Tandon. *UK*

Post-operative nausea and vomiting (PONV) is the predominant reason for unplanned admissions of day surgery patients. Prophylactic measures have proven difficult due to multifactoral aetiology of nausea and vomiting and universal prophylaxis is not cost effective.
Pre-operative fasting sometimes inadvertently for undesirably longer periods results in dehydration and stress due to discomfort thus caused [1].
A number of studies have shown beneficial effects of peri-operative fluid therapy. Peri-operative fluid therapy reduces the incidence of PONV in patients undergoing ambulatory surgery. As a result early oral intake is possible thus improving post-operative recovery.
A number of published controlled trials have recommended different regimes for peri-operative fluid therapy. 30 ml/kg better than 10 ml/kg in reducing PONV and anti-emetic medication [2]. Large infusions of 2 ml/kg of compound sodium lactate for every hour of fasting pre-operatively [3].
An internal audit was done in our dedicated day surgery unit, results of which are presented.

References

[1] Habib AS et al. Canadian J. Anesthesiology 2004; 51: 326–341.
[2] Magner JJ et al. BJA 2004; 93(3): 381–385.
[3] Maharaj CH et al. Anaesthesia Analgesia 2005; 100: 675–682.

3 Day care surgery in Hungary. Preoperative assessment

M. Janecsko, K. Nagy. *Semmelweis University Hospital, Budapest, Hungary*

Introduction: the growth in day surgery has been rapid, but not all countries have seen the same level of development. The selection of suitable patients for suitable operations is the basis for the good surgical practice. The anaesthesia preassessment clinic for the preoperative evaluation recently been widely suggested.
The day surgery in Hungary has been introduced in 2002.
Method: preoperative evaluation of patients schedule day case operations in our Hospital.

Risk classification (1032 patients)		Co-existing diseases (391 patients = 38%)	
ASA I	498	Hypertension	132
ASA II	413	CHD	61
ASA III	121	Diabetes	35
		Obesity	56
		Others	68

Discussion and Results: Hungarian Guideline for preoperative assessment before day surgery:
ASA I–II patients: medical history, physical examination, laboratory tests individually, ECG and X-ray if indicated.
For coronary patient: ECG – echocardiography/Holter – exercise stress test–myocardium scintigraphy–angiography.
Preoperative preparation needed: 82 patients.
Contraindication: 39 patients.
Perioperative cardiovascular complications: minor: <1%; major: none.
Summary: the majority of elective surgery will be performed on a day case basis. Patient selection is the cornerstone to successful day surgery.

References

[1] Millar JM. Patient selection, assessment, and preparation in Smith I, ed. Day Care Anaesthesia, pp. 1–32, BMJ Books 2000.
[2] Troy AM, Cunningham AJ. Ambulatory surgery: an overview. Curr Opin Anaesthesiol 2002; 15: 646–657.
[3] Chung F, Mezei G, Tong D. Pre-existing medical conditions as predictors of adverse events in day-case surgery. Br J Anaesth 1999; 83: 262–270.

4 Anesthesia Assisted Opiate Detoxification (AAOD) for heroin addicts during 24 hour hospital admission: complications of anaesthesia, and results for opiate abstinence at one year follow-up

C.J. De Jong. *Kliniek de Lairesse, Amsterdam, the Netherlands*

Aim:
1. To list addiction related health problems in a group of 67 patients addicted to heroin and/or methadone, who were treated with AAOD during 24 hour ICU admission.
2. To evaluate complications of AAOD on the day of treatment and during the first week after AAOD.

3. To evaluate the effect of our post AAOD treatment program, consisting of naltrexone combined with cognitive behavioural therapy (CBT) for one year after AAOD, on abstinence from opiates, employment, training and education, and criminal behaviour one year after the AAOD treatment.

Method: A retrospective descriptive study of the files of patients who had an AAOD between 10–03–2000 to 10–03–2002. Data was analysed using the χ^2 test.

Results:

1. The average length of opiate addiction in this group of 67 patients (57 men) was 12.8 years. 61 patients (91%) were in methadone programmes for an average 8.2 years. 35 patients (52%) had 3 or more failed detoxifications. 19 patients (28%) were underweight (BMI < 20), and 29 (43%) had mild to moderate respiratory problems. 30 patients (45%) had used intravenous drugs, of whom 13 (43%) were Hepatitis C positive, 7 (23%) hepatitis B positive, and 3 (10%) were positive for hepatitis B and C. No HIV positive patients were found.
2. Complications after AAOD: vomiting (more than 2× per day): in 10 patients (15%), diarrhoea (more than 3× per day) in 3 patients (4%). No aspiration pneumonia or renal failure was seen. One patient was admitted to a hospital for two days to prevent dehydration.
3. The results for abstinence, employment, training and education, and criminal behaviour are shown in the table.

N = 67	Before detoxification	after 1 month	after 1 year	
Opiate abstinence	0 (0%)	63 (94%)	47 (70%)	
Employment	32 (48%)	34 (51%)	46 (69%)	P < 0.02
Training and education	2 (3%)	4 (6%)	8 (12%)	P < 0.001
Criminal behaviour	56 (84%)	10 (15%)	15 (22%)	P < 0.001

Conclusion:

1. Although the majority of patients in this group made use of methadone programmes, they still often suffered from health problems common to intravenous drug users such as being underweight, respiratory problems and Hepatitis B and C. No HIV positive patients were found.
2. Complications of anaesthesia and detoxification (AAOD) were infrequent and not severe. A 24 hour hospital stay was enough in all but 1 patient.
3. AAOD and naltrexone combined with CBT as provided by our clinic leads to opiate abstinence in 70% of patients after one year and a significantly higher participation in employment, training and education, and a significant decrease in criminal activities.

5 Comparison of intravenous parecoxib and ketorolac in the treatment of postoperative pain after outpatient varicose vein surgery

T. Barreto, N. Guimarães, F. Barros, L. Fonseca, P. Lemos. *Hospital Geral de Santo António, SA, Porto, Portugal*

Background and Goal of Study: Relief of pain is one of the major concerns of day surgery programmes. The aim of this study was to evaluate and compare the efficacy and safety of analgesic activity between Parecoxib (COX2 inhibitor) and Ketorolac (non-specific NSAIDs).

Materials and Methods: A randomised, double-blinded, prospective study was performed. Forty ASA physical status I/II patients, scheduled for varicose vein surgery on a day surgery basis under general anaesthesia were enrolled in this study. Patients were randomised to receive a single IV dose of parecoxib 40 mg and paracetamol 1 g (Group A; n = 20) or ketorolac 30 mg and paracetamol 1 g (Group B; n = 20) at the induction of anaesthesia. Data were analysed with t-test and χ^2 test and adopted a significance level of 0.05.

Results and discussion: Patient characteristics, surgical types, duration of anaesthesia were similar in both groups.

Variables	Group A	Group B	χ^2 test
Pain score ⩾3 (%)	10 (0.5)	4 (0.2)	p = 0.047
Analgesic rescue (%)	9 (0.45)	3 (0.15)	p = 0.038
Time for analgesia rescue (<60 min) (%)	9 (0.45)	1 (0.05)	p = 0.0035
Satisfaction score (mean±SD)	9.65±0.74	9.55±0.51	p = 0.17

Patients in the parecoxib group showed a significant higher incidence of pain, more necessity and sooner administration of analgesic rescue medication than did those in the ketorolac group.

This study seems to demonstrate that analgesia with ketorolac is more effective in relieving acute pain after varicose vein surgery.

6 Ambulatory anti-reflux surgery: learning from the cholecystectomy experience

C. Hammond, C. Cherubu, I. Smoith. *University Hospital of North Staffordshire, UK*

Introduction: Laparoscopic cholecystectomy has become established as a safe and effective ambulatory surgery procedure in Britain and much of Europe, but Nissen's fundoplication has not. Following an exploratory visit to a pioneering centre in Norway, we observed that much of the perioperative management was similar to that for a cholecystectomy. With the enthusiastic support of a laparoscopic surgeon, we commenced a pilot programme of ambulatory Nissen fundoplication.

Methods: Patients received slow-release ibuprofen 1600 mg and paracetamol 1 g, by mouth, about an hour before surgery. Anaesthesia was induced with midazolam, alfentanil and propofol and maintained with sevoflurane in nitrous oxide. The trachea was intubated, but rapid sequence induction was not preformed.

Multimodal antiemetic prophylaxis was provided with ondansetron, cyclizine, metoclopramide, dexamethasone and 2 litres of intravenous fluid. Further opioid analgesics were not administered and surgical portals were infiltrated with levobupivacaine. Immediate postoperative pain was treated with morphine or co-codamol. Ibuprofen, co-codamol and ondansetron were provided to take home. Patients were telephoned on postoperative days 3, 5 and 7. Other than the passage of a naso-gastric tube and the occasional induction of anaesthesia in the semi-sitting position if reflux was present when lying flat, the technique was identical to that which we use for cholecystectomy.

Results: Since July, we have completed seven Nissen fundoplications, all of which have been successfully discharged on the day of surgery. Surgery involved a 360° wrap with 3 sutures and without division of the short gastric artery.

There were 5 males and 2 females, mean age 46 (26–59). Six patients were ASA I or II, but one was a tablet-controlled diabetic. Mean operating time was 96 (60–144) min and mean postoperative stay was 7.2 (6–8.1) hours. Five patients required postoperative morphine, but 2 did not. The first patient was readmitted with severe pain on the first postoperative day, thought to be due to gas bloat from the effervescent co-codamol prescribed. The formulation was changed for this and subsequent patients and the problem has not recurred. There were no other readmissions.

Post-discharge pain (0–10) was worse on the first day; median 7 (1–9) and reduced over days 3, 5 and 7 (4 [0–7], 2 [0–4] and 1 [0–7], respectively). Pain was usually worse on swallowing. Three patients experienced postoperative nausea (3–7) and 4 did not; there was no pattern to the timing. All patients were highly satisfied (9 or 10 out of 10) and were happy to have been treated by ambulatory surgery.

Conclusions: If an ambulatory surgical unit is successfully managing cholecystectomies, they should be able to manage Nissen's fundoplication with minimal changes to their protocol, provided there is a surgeon competent to perform the procedure. The anaesthetic technique need not be radically different, but must permit good quality recovery after up to three hours of surgery. Patient information needs to be modified to warn of dysphagia and provide appropriate dietary

advice. Because of the risk of gas bloat, all fizzy drinks should be avoided and this includes effervescent medications.

7 Minimally invasive anesthesia (TM) technique for minimally invasive surgery

B. Friedberg. *Corona del Mar, USA*

Elective cosmetic surgery is, by definition, minimally invasive, because it does not invade the body cavities. Anesthesiologists need to consider improving outcomes (i.e. PONV & postop pain management), safety and patient satisfaction by adopting a minimally invasive anesthesia (MIA) TM technique. The MIA(TM) technique is clonidine premedicated, BIS monitored, infusion pump titrated propofol for PK (MAC). The MIA(TM) technique consistently yields pre-emptive analgesia. Postoperative pain management begins with clonidine premedication, lowering the patient's adrenergic state to baseline. Incrementally titrating propofol to BIS 70–75 prior to administration of 50 mg dissociative dose of ketamine eliminates the hallucinations, hypertension and tachycardia historically reported with ketamine. Measuring the level of propofol before administering ketamine makes this notorious agent predictable and extremely useful. The painful stimuli of the injection of local anesthesia do not reach the patient's cortex. Ketamine provides a 'midbrain spinal' blocking the entry to the cortex of these noxious stimuli. The brain cannot respond to signals it does not receive. When BIS is 60–75 while patient movement occurs, the surgeon must be educated that more local analgesia is the most appropriate and effective therapy. The MIA(TM) technique scrupulously avoids emetogenic opioids, resulting in a 0.5% PONV rate without the use of antiemetics even in a high risk group (i.e. non-smoking females with histories of previous PONV having elective cosmetic surgery of 2+ hours). The extra attention the MIA(TM) technique requires during the surgery is returned many times over in increased patient throughput and rapid discharge of safe, happy patients who are eager to share their pleasant experiences with friends and family.

8 Video laparoscopic cholecystectomy in Day Surgery

R. Monzani[1], F. Carrera[1], S. Bona[2]. *Gruppo di Studio SIAARTI per la Day Surgery. [1]Servizio Anestesia U.O. Day Hospital Chirurgico, Instituto Clinico Humanitas, Rozzano (MI), Italy; [2]U.O. Chirurgia Mininvasiva, Istituto Clinico Humanitas, Rozzano (MI), Italy*

We studied 168 patients, mean age 44 years. The inclusion criteria in the study were: scheduled surgery, patients ASA 1 and 2, ASA 3 only if the pre-existent pathology was compensated with adequate therapy and the surgery did not worsen the clinical status. On the day of the operation, the patient is pre-medicated with midazolam 0.07 mg/kg and atropine 0.007 mg/kg i.m. To prevent nausea and vomiting ondansetron 4 mg and ranitidine 50 mg i.v. are given. We performed a total intravenous general anaesthesia. The induction is obtained by continuous infusion of remifentanil 2.5 μg/kg in 5 minutes, than a bolus of 2.5 mg/kg of propofol. After oro-tracheal intubation the anaesthesia is maintained with a continuous infusion of remifentanil 0.25 μg/kg and propofol 2.5–3 mg/kg, cisatracurium 0.15 mg/kg is given at the start of the surgery. The IPPV is maintained with a mixture of air and oxygen at 50%. 15 minutes before the end of surgery to control the post-operative pain, we administered ketorolac 60 mg i.v. In the recovery room the patient is controlled and all the vitals parameters are monitored. If after 6 hours everything was with no complicance, the patient was discharged with a modified Aldrete score. Of all the 168 patients, 79% was discharged in the same day of surgery and the 12% were excluded.
The duration of operation has been mean 80 minutes and the post-operative observation has been of mean of 7 hours and 15 minutes.
92.8% of the patients has been satisfied as a single day procedure.

9 Preoperative fasting and day surgery anaesthesia: What are the recommendations?

K.H. Chin, J. Healy, S. Gwilym, J. Ellams, D. McWhinnie. *Milton Keynes Hospital, UK*

Background: Fluids and solids are traditionally denied from patients who are undergoing surgery (nil by mouth policy). Despite good evidence to suggest prolonged fasting prior to surgery has no benefit over more liberal regimens [1–3] many hospital units in the United Kingdom (UK) adhere to different fasting guidelines. In addition, there are no published national recommendations for good practice. In this study, the current practice of preoperative fasting in the UK is determined.
Methods: A structured questionnaire on preoperative fasting was sent to seventy Day Surgical Units (DSUs) throughout the country.
Results: Fifth eight questionnaires (83%) were returned. Eight questionnaires (11%) were inadequately completed and therefore excluded from this study. The median fasting period for fluids was 3±4.2 (2SDs) hours and for solids was 6±2.4 (2SDs) hours for adults prior to surgery.
In children, the median preoperative fasting times were similar to those of adults (fluids: 2±2.8 [2SDs] hours and solids: 6±2.4 [2SDs] hours). For local anaesthetic procedures, 72% of DSUs allowed both groups of patient to eat and drink as per usual, 16% recommends light diet but 12% still adhered to a strict fasting regime as per general anaesthesia.
Conclusions: There is no overall consensus for fasting times before anaesthesia in the United Kingdom. Many adults may suffer the inconvenience of unnecessary fasting. Children are sensitive to prolonged fasting and hypoglycaemia can be an unexpected complication. Therefore, we urge our colleagues to adopt a more liberal preoperative fasting regime that is consistent with anaesthetic safety in both adults and children.

References

[1] Read MS, Vaighan RS. Allowing pre-operative patients to drink: effects on patients' safety and comfort of unlimited oral water until 2 hours before anaesthesia. Acta Anaesthesiologica Skandinavica 1991; 35; 591–5.
[2] Smith AF, Vallance H, Slater RM. Shorter postoperative preoperative fluids fats reduces prolonged activity. British Medical Journal 1997; 314: 1486.
[3] Strunin L. How long should patients fast before surgery, British Journal Anaesthetists 1993; 70; 1–3.

10 Comparison of hyperbaric lidocaine and mepivacaine in outpatient saphena stripping

M. Solca, C. Sibilla. *Clinica S. Anna, Ferrara, Milano, Italy*

Ideal spinal anaesthesia for day surgery should combine fast and adequate level with rapid achievement of discharge criteria. These goals suggest the choice of selective spinal anaesthesia with short or intermediate-acting local anaesthetics (lidocaine or mepivacaine), in association with low dose of lipophylic opiates (fentanyl or sufentanil). We compared low doses of intrathecal hyperbaric lidocaine and mepivacaine combined with sufentanil for outpatient varicose vein surgery, with respect to onset, spread, duration and regression of sensory and motor blockade and side effects (PDPH, TNS), and patients' satisfaction.
One hundred ASA I–III patients, 18 yr or older, scheduled for elective outpatient varicose vein surgery not to exceed 60 min, were randomised to receive 2.5 μg of sufentanil and 30 mg 1% hyperbaric spinal lidocaine or 2.5 μg of sufentanil and 30 mg 1% of mepivacaine. Spinal injection was performed in the lateral decubitus position with the operative side down, using a midline approach at the L1–L2 interspace.
We recorded: incidence of failed anaesthesia, defined as patient discomfort that required conversion into general anaesthesia; incidence

of pruritus, nausea and vomiting not related to hypotension; onset time and duration of surgical anaesthesia, defined as T12 sensory anaesthesia to pinprick; maximum upper spread of sensory block and onset time at that level; frequency, onset time and duration of complete motor block. Sensory loss of pinprick was tested using a sharp needle. Sensory and motor block levels were assessed in the dependent side. Home discharge time was assessed by standardized discharge scoring criteria: vital signs within 20% preoperative value, absent or minimal nausea and vomiting, minimal or moderate pain, ability to walk (as defined by normal perianal sensation, plantar flexion of the foot and proprioception in the great toe). All patients received postoperatively oral ketoprofen 100 mg TID for 4 days or more since the end of surgical anaesthesia; the dose was reduced to 50 mg in patients over 75 years of age.
Patients were interviewed six days after surgery on the incidence and duration of: headache, sensory disturbances, nausea and vomiting, difficulties in voiding, TNS (defined as pain or dysesthesia in one or both buttocks or legs occurring within 24 h of surgery: isolated back pain was not considered to be TNS and was recorded separately). Pain was assessed using a verbal pain rating scale (0 = no pain, to 10 = worst pain imaginable).
Student's t-test and Chi^2 test were used: $P < 0.05$ was considered statistically significant.
Demographic data were similar in the two groups. All patients experienced adequate surgical anaesthesia intensity. Duration of sensory block (78.3±20 vs. 65.6±18 min, $P < 0.05$) was significantly longer with mepivacaine than lidocaine, as well as motor block (42.6±13.5 vs. 39.4±12 min, NS) and maximum cephalad spread [5.5(3) vs. 7.5(2.8) dermatomes, median (range), NS], although not significant. Home discharge time was also significantly longer with mepivacaine (132±32.8 vs. 114.8±29.8 min, $P < 0.05$).
No one patient had postoperative urinary retention nor required overnight admission. Pruritus was quite frequent (58 vs. 68%, NS), but very few patients experienced nausea and vomit (1 vs. 4, NS) in both groups. There were no complaints of PDPH at the follow up interview, while backache (6% in both groups) and TNS (4% in both groups) were limited and no difference was evident between treatment groups. Patients' satisfaction was elevated in both groups (98 vs 96%, NS).
Our findings suggest that spinal anaesthesia with short or intermediate-acting local anaesthetics (lidocaine or mepivacaine), in association with low dose of lipophylic opiates (sufentanil) is safe and effective for day surgery, with lidocaine being preferred for short duration procedures.

11 Thromboprophylaxis in day surgery – yes or no?

M. Achawal, K. Patil, E. Clements. *Whipps Cross University Hospital, London, UK*

Objective: Venous thromboembolism is a recognised complication of surgery. Increasing numbers of patients are now being operated in a day case setting. A nonfatal pulmonary embolism following day case arthroscopic knee surgery prompted us to investigate current practice of thromboprophylaxis in UK day surgery units.
Method: A thorough literature search was carried out to design a set of questions. We then conducted a telephone survey of randomly selected day units.
Results: Seventy five day units responded to the survey. A need for thromboprophylaxis was recognised by 44 (58.2%) centres while 21 (28%) did not think it was necessary. Ten (13.3%) did not opine. Eleven (14.6%) units followed guidelines specific for the unit and 19 (25.3%) followed the same policy as the rest of the hospital. In 45 (60%) centres no guidelines were in use but 18 of these used prophylaxis at the discretion of the surgeon or the anaesthetist.
Twenty three (30.7%) day units do not use any prophylaxis. One to two doses of Low Molecular Weight Heparin and/or compression stockings were preferred methods of prophylaxis.
Conclusion: There is increasing awareness of the need for thromboprophylaxis in day surgery. However there is no uniform consensus about its use. Guidelines specific for day surgery should be established.

12 Postoperative analgesia with parecoxib 40 mg vs ketorolac 30 mg after endometrial thermoablation in gynecologic day-surgery

M.C. Pace, M.B. Passavanti, P. Sansone, M. Iannotti, C. Cammarano, C. Aurilio. *Second University of Naples – Department of Anaesthetics, Surgical and Emergency Sciences – "SIAARTI Day Surgery Committee", Italy*

The aim of this study was to compare the analgesic efficacy of the administration of iv parecoxib 40 mg and iv ketorolac 30 mg in the post-operative after endometrial thermoablation. After informed consent 52 women were randomized to receive iv parecoxib 40 mg (Group P) or iv ketorolac 30 mg (Group K) at the end of the surgery. We recorded time of discharge, analgesic efficacy and tolerability of both drugs, post-operative nausea and vomiting (PONV) and administration of additional doses of analgesic drugs. Measures of efficacy were: Pain Intensity Scale (score 0–4) at the awakening, two hours after the surgery and at discharge.
Results: Statistical analysis was performed using SPSS version 12.0 for Windows. The stability of the emodynamic parameters, pain at the awakening (mild-moderate) and the onset time of the analgesic effect (P 15±8 min, K 20±7 min) show no significant differences between groups P and K. PONV occurred in one group-P subject and in two group-K subjects. The Pain Intensity scores after 2 hours and at discharge were more satisfying in group P. The administration of additional doses was significantly higher in group K (6 pt. vs 1 pt.) ($P < 0.05$). In group P hospitalization lasted 4–6 hours whereas in group K 6–8 hours.
Conclusions: These results indicate that a single administration of iv parecoxib sodium 40 mg compared with a single dose of iv ketorolac 30 mg shows a better analgesic effect with a lower administration of additional doses and a prolonged time of action that means shorter time of discharge.

13 Efficacy of sedation without opiates for cancer diagnostic procedures in gynaecologic day-surgery

M.B. Passavanti, P. Sansone, M. Maisto, T.E. Giuffrida, D. Romano, M.C. Pace. *Second University of Naples – Department of Anaesthetics, Surgical and Emergency Sciences – "SIAARTI Day Surgery Committee", Italy*

The immunosuppressive effects of the opiates and the surgical stress could lead to an increase of postoperative infections and a possible lack of immunological defence in the cancer patients; we considered to eliminate the administration of opiates during minor operations in gynaecologic oncology day surgery.
Materials and Methods: After informed consent, 220 patients, aged between 35 and 77 years, underwent biopsy of the cervix, vulva and vagina, diagnostic curettage and hysteroscopies. The patients were randomized into two equal groups. During surgery, we monitored: ECG, HR, RR, NIBP and SpO_2.
All patients received TIVA with atropine, midazolam and propofol. Furthermore group F received i.v. fentanyl 0.1 mg at premedication, group B received paracervical block (PCB) with mepivacaine 2% 10 ml (5 ml each side).
In all patients we recorded: time of hospitalization and discharge, drugs used during the surgery and postoperatively, degree of satisfaction, nausea and vomiting. Pain was assessed by using a VAS score (0–100).
Results: There were no significant alterations of monitored parameters in both groups. The requests of analgesic drugs during the postoperative time show a statistical significance between groups B and F ($P < 0.05$, t-Student test). Four patients in group F and two in group B experienced postoperative vomiting. VAS values were no significantly different between both groups. Hospitalization never exceeded the 8 hours, but there was a significant difference in the time of discharge (B: 4–6 h vs. F: 6–8 h) ($P < 0.001$ Student's t-test). All the patients were satisfied.

Conclusions: Results demonstrate that the anaesthetic technique with PCB associated with conscious sedation, without fentanyl, is an ideal approach for several gynaecological procedures in a day hospital.

14 Paediatric day-case tonsillectomy – improving clinical outcomes by continuous audit

G. Abbondati. *Central Middlesex Hospital, London, UK*

ACAD is the first purpose built elective threatment and diagnostic centre in the UK, opened in 1999. On the surgical side, we perform 8–14,000 day and short stay surgery (48 h max stay) operations per year, including laparoscopic cholecystectomies, TURPs and ACL repairs. All surgical activity is based on clinical protocols, which start with nurse-led pre-assessment through to nurse-led discharge. We have done paediatric day case tonsillectomies since opening, again using clinical protocols that gave us the possibility of continuosly audit our results.We routinely call our patient at home postoperatively at 24 h, 7 days, and 30 days. This feedback enabled us to improve our clinical outcomes by:

- improving patient and parent education at pre-assessment, especially regarding pain on the 4th-5th postoperative day, and how to manage it
- improving postoperative pain by standardising the intraoperative analgesic regime, thus reducing recovery time to discharge to 4–5 h
- reducing the need for distressed children and parents to consult their GP or even visit their local A&E by giving them precise instructions to deal with common post-op problems.

Very close cooperation between surgical, anaesthetic, and especially dedicated paediatric nursing staff is essential to achieve any improvement.

Posters

15 Infusion of muscle relaxants superior to intermittent administration

H.R. Vinik. *Callahan Eye Hospital, Birmingham, USA*

Seventy (70) patients having elective eye surgery were randomized to receive either cisatracurium or rocuronium by infusion or intermittent boluses to maintain a 95% twitch depression (Train of four $\frac{1}{4}$).
Equipotent dosages were compared during a standardized inhalational anesthetic regime. Infusions were superior for: TOF $\frac{1}{4}$ maintenance (75 vs. 50.5%*), required intervention per hour, 1.6 vs. 2.9. Time to recovery (TOF 4/4), 4.1 vs. 5.1 min. Spontaneous respiration 5.9 vs. 6.7 min. Extubation time 8 vs. 9.8 min. Leave OR 11.1 vs. 13.7 min.
Recovery characteristics of cisatracurium bolus group were superior to rocuronium boluses. Spontaneous respiration 4.9 vs. 8.5 min*, Extubation 6.8 vs. 12.5 min*, Leave OR 8.9 vs. 18.5 min*. Infusion groups had similar recovery times. *$P > 0.05$.
Conclusion: Infusion of intermediate duration muscle relaxants is clinically superior for maintenance and recovery compared to intermittent administration. Consequently recovery and discharge from ambulatory units would be facilitated.

16 Evaluation of anaesthesiologic and therapeutic plans in Day Surgery in Campania (Italy)

B. Lettieri, S. Sorrentino, N. Tenga, G. Pasta, E. Infuso. *Napoles, Italy*

Objectives: To evaluate the diagnostic and therapeutic plans in day-surgery: study of the clinical-organizative effects and of the anaesthesiologic plans in four differently organized hospitals of region Campania (Italy).
Methods and Materials: Multicentric regional study (March 2003–November 2004). 777 patients: 411 Males (44.7±14.8 years) and 360 Females (43.1±17.1 years) subject to day-surgery (abdominal, orthopaedic, vascular or obstetric–gynaecologic surgery).
The algorithm provided for three access; two steps in the preoperatory phase and one in the postoperatory. In the postoperatory phase the discharge criteria of Joint Comission of Accreditation of Health Care have been evaluated. The degree of patients satisfaction has been evaluated by phone interviews with a standardized questionnaire.
Results: As for the degree of patients satisfaction, data analysis has shown that 75% of patients is completly satisfied or very satisfied. It has been considered a day-surgery failure the case of patients not discharged on the same day of operation for surgical or/and anaesthesiologic complications. The statistical analysis of data has shown a day-surgery failure in 48 cases out of 777 (6%). The causes have been: PONV (41%), blood loss (37%), duration of operation >2 hours (9%), the resting of sensory-motor block (7%), instability of vital signs (6%).
Conclusions: From our experience results that day-surgery in Campania is associated to a high degree of patients satisfaction and a very low percentage of complications and so of failure.

17 Evaluation of acute pain management following ambulatory surgery. Study of clinical practice in the north-east of France

E. Durand, C. Cornet, F. Empereur, T. O. *University Hospital of Nancy, France*

Introduction: Postoperative pain is often suboptimally managed following ambulatory surgery (Can J Anesth 2004; 51: 886–891). We objectively evaluated current clinical practice in 14 centres in order to detect any shortcomings pertaining to current guidelines (JCAHO; 2001).
Methods: Observational, surveillance study involving 14 centres, from October to November 2004: qualitative analysis of patient records and, telephone interviews of all consented patients 7 days following ambulatory surgery.
Results and conclusion: 119 patients were included in this study. 50% had received information regarding postoperative pain preoperatively. Discharge summaries, inclusive of pain scores, were filed in 45% of records. A postoperative information leaflet, given to 87% of patients, included details of a contactable physician in only 23% of cases. Analgesics were prescribed for 60% of patients; NSAIDS being prescribed in only 14% of cases. Opioid rescue therapy was never prescribed. A discharge letter addressed to the General Practitioner (GP) was given to 45% of patients. 58% of patients experienced postoperative pain: 90% at home, especially during the first two postoperative days (37% on D0 and 40% on D1). 18% of patients resorted to automedication and only 4% consulted their GP. 7 days postoperatively, 1 in 3 patients still considered their daily activity level reduced by more than 40%. This study has identified a deficiency in the provision of patient information/education, underprescribing of analgesics, and lack of communication with the GP.

18 LMA ProSeal in ambulatory laparoscopic gynecological surgery without myoresolution

M.C. Soccorsi, G. Falcone, G. Bettelli. *AZ. Ospedaliera Universitaria Policlinico di Modena, Italy*

We studied 21 ASA I–II female patients, aged 31±5 (range: 21–40), with BMI of 24.2±4.1 (range: 18–31), scheduled for minor gynecological outpatient procedures (diagnostic and sterilization) with general anaesthesia and mechanical ventilation through LMA ProSeal (PLMA) size 4, and standard monitoring. Anaesthesia was induced by propofol 2.5 mg.kg^{-1} and fentanyl 2?.kg^{-1}, and then maintained by propofol 6 mg.kg.h^{-1} and sevoflurane 0.5 MAC; no muscle relaxants were administered. After pre-oxygenation without manual ventilation to avoid gastric distension, PLMA was inserted and then cuffed, initially with 20 ml of air, and then with the

needed amount of air to obtain absence of leaking at an initial tidal volume (VT) of 10 ml.kg^{-1}. Mechanical ventilation was delivered at a respiratory rate of 15 breaths/min; VT was increased when the end-tidal carbon dioxide pressure (ETCO2) exceeded 40 mmHg, whereas respiratory rate was reduced when ETCO2 decreased below 30 mmHg. Abdominal distension was obtained in two steps, the first at 1.3 l/min until a maximum 15 mmHg pressure was reached, and the second to maintain this value. Supplemental boluses of propofol (50 mg) were administered when heart rate or systolic blood pressure values increased more than 10% of the basal value, or when spontaneous movements appeared. Airways peak pressure was measured at the following steps: T1 (shortly after PLMA insertion), T2 (end of the first step), T3 (5 minutes after tilting pts in Trendelenburg position when requested by surgeons). The number and duration of episodes of leaking, the additional propofol boluses administered and the corresponding SatHbO2 and ETCO2 values were registered. The mean airways peak pressure increment following abdominal distension was 7.9±4.2 cmH_2O. The mean increment following Trendelenburg position was 6.1±2.8 cmH_2O. In 11 pts, a leaking was audible at the moment of maximum abdominal distension, lasting 5±2 min (range: 1–10), in 7 of them because of insufficient anaesthesia promptly corrected by propofol boluses administration. No variations in SatHbO2 and ETCO2 were observed. No correlation was found between the BMI and peak airways pressure values.

19 Outpatient anterior cruciate ligament reconstruction: a review of 532 patients

G. Armellin. *Azienda Ospedaliera Padova, Italy*

All outpatient anterior cruciate ligament (ACL) reconstructions performed at our Free Standing Ambulatory Surgery Centre between 2001 and 2004 were retrospectively studied. 532 patients (pts) were analyzed.
471 (88.5%) pts underwent general anaesthesia (GA) and 61 (11.5%) were submitted to spinal anaesthesia (SA). All the pts in the GA group received ketorolac 60 mg and dexamethasone 4 mg before surgery for preemptive analgesia, postoperative nausea and vomiting (PONV) prophylaxis. Anaesthesia consisted of weight-related doses of propofol, remifentanil and sufentanil or fentanyl. Pts were ventilated by a laryngeal mask. In the SA group we used 0.5% hyperbaric bupivacaine 7–8 mg. At the end of the operation all pts received 0.5% ropivacaine 20 ml and clonidine 1 μg kg^{-1} into the knee joint. Demographic and operative data are showed in table 1. There were two unplanned admissions: one for bleeding and another for recurrent syncopal episodes. Two other pts were readmitted for knee infection. Postoperatively all pts were submitted to cryotherapy and received paracetamol 1000 mg and ketoprofen 200 mg per os. 47 pts (8.8%) needed a rescue drug for pain (ketorolac or sufentanil). 27 pts (5%) complained vasovagal episodes: they were given atropine and saline for rehydration. PONV was present in 16 pts (3%).
Nobody was admitted for intractable pain or PONV. Although ACL repair is a painful procedure, nearly all pts were rapidly discharged and complications rate was very low. This procedure can be performed safely and effectively in a day surgery setting.

Table 1: Demographics and operative data

Male/female	396/136
Age (years)	31.8 (17–49)
Weight (kg)	73.3 (40–113)
Height (cm)	174.7 (152–202)
Operation time (min)	46 (18–151)
General Anaesthesia (#)	471
Spinal Anaesthesia (#)	61
Time to discharge (min)	237 (64–525)

Data are expressed as mean (range) or number.

Table 2: Complications

Rescue drugs for pain	47 (8.8)
Vasovagal episodes	27 (5.1)
Unplanned admission or Readmissions	4 (0.75)
Nausea	12 (2.2)
Vomiting	4 (0.75)

Data are expressed as number (%).

20 Nocturnal episodic hypoxemia after ambulatory breast cancer surgery

G. Shirakami, K. Fukuda. *Department of Anesthesia, Kyoto University Hospital, Kyoto, Japan*

Purpose: To study the incidence of nocturnal episodic hypoxemia after ambulatory breast cancer surgery and its difference between sevoflurane and propofol anesthesia.
Methods: Sixty-one adult female patients (ASA PS I–II, age 32–77 yr) without an apparent history of sleep apnea and a respiratory disease undergoing major breast cancer surgery at outpatient basis and planned overnight admission were randomized to one of two anesthesia maintenance groups: sevoflurane (S, n = 31), or IV propofol, fentanyl and vecuronium (P, n = 30). All patients were administered with propofol 2 mg/kg IV for anesthesia induction, laryngeal mask airway placed for airway maintenance, and received rectal dicrofenac and local infiltration anesthesia for pain relief. No opioid analgesic and oxygen were administered after discharge from postanesthesia care unit. Oxygen saturation (SpO_2) was recorded continuously during the first postoperative night. SpO_2 < 90% lasting at least 10 s were regarded hypoxemia and percentage of recording time with SpO_2 < 90% (%Time SpO_2 < 90) were evaluated.
Results: Six patients (S3, P3) had >1% of %Time SpO_2 < 90 (L-Hypoxia group), 23 (S11, P12) had >0 and <1% (S-Hypoxia group), and 32 (S17, P15) had 0% (No-Hypoxia group). There were no difference in age, height, ASA-PS, duration of anesthesia, and times to first drinking, ambulation and voiding after surgery among the three groups. L-Hypoxia group had higher body mass index (BMI, 26±4 kg/m^2) than no-Hypoxia group (21±3). No patient developed major complications.
Conclusion: Nocturnal episodic hypoxemia after ambulatory breast cancer surgery was not rare. The incidence of hypoxemia was not different between sevoflurane and propofol anesthesia. Hypoxic patients had higher BMI.

21 TIVA in day-surgery

R. Rago, L. Bianchi, L. Lombardi, A. Paolicchi, F. Giunta. *Hospital S. Chiara, Pisa, Italy*

Background: The aim of Day-surgery Units is a short term in hospital stay, thus limiting patient discomfort and reducing costs. Its main drawback is the limited time of direct observation of the patient. So it's imperative that the anaesthesiological and surgical procedures be safe and effective. In our Day-surgery Unit the majority of operations is performed under general anaesthesia (thyroidectomy, parathyroidectomy, laparoscopic cholecystectomy and major breast surgery). In this study we evaluated the role of TIVA for general anaesthesia procedures performed in Day-surgery.
Materials and Methods: We analysed retrospectively data from 4759 patients exposed to TIVA for day-surgery procedures. Data were prospectively collected by structured interview sheets, including subjective intraoperative and postoperative events, both before discharge and after 3 weeks.
Results:
- Haemodynamic values
  - Preoperative medium arterial pressure: 101.5±2.1
  - Intraoperative medium arterial pressure: 83±3.5

- Preoperative medium heart rate: 83.5±2.1
- Intraoperative medium heart rate 72.1±5.0

- Neither phenomena of awareness nor post-traumatic stress syndrome have been recorded
- PONV value after awakening: 9% of patients
- Index of hospitalisation (re-admission or prolonged hospitalisation): 0.73%
- 97% of patients declared they would submit again to same anaesthesiological procedures.

Conclusions: TIVA is a suitable anaesthesiological procedures for general anaesthesia operations performed during a short hospital stay. Its main features include:

- fast induction without important neurovegetative responses
- intraoperative haemodinamic stability
- rapid awakening without collateral effects

According to our experience, TIVA in day-surgery guarantees the safety of patients and allows a short hospitalisation.

22 Parathyroidectomy in day-surgery: general or locoregional anaesthesia?

R. Rago, L. Bianchi, L. Lombardi, A. Paolicchi, F. Giunta. *Hospital S. Chiara, Pisa, Italy*

Background: The optimal anaesthesiological technique in day-surgery would have to supply excellent operating conditions, fast discharge, low complications rate and high degree patients' satisfaction. We estimated which anaesthesiological technique, general or locoregional, is best suitable for day-surgery patients undergoing minimal access, video-assisted parathyroidectomy.

Patients and Methods: This is a prospective randomized study performed in a tertiary referral hospital (Dept. of Surgery, University of Pisa). Inclusion criteria: patients with primary hyperparathyroidism undergoing their first operation, with presumptive diagnosis of single gland disease. All patients gave informed consent to enter the study. Patients were randomized to receive bilateral deep cervical block, executed according to modified Lo Gerfo-Diktoff tecnique (L group) or general anaesthesia by total intravenous anaesthesia (G group). Randomization was done with closed envelopes as patients entered the operative theatre. Main outcome measures: intraoperative pain and discomfort, collateral effects, drug consumption and patients' satisfaction.

Results: Forty patients were enrolled in the study (twenty in the L group, twenty in the G group).

Intraoperative pain and comfort: the visual analogic score values ranged between 0 and 1 and the comfort was good–optimal. Collateral effects: L group: two headache (10%) and one decubitus pain cases (5%). G group: six headache (30%), six decubitus pain (30%), two shiver (10%) and two nausea cases (10%).

Drugs consumption: L group: the ketorolac medium dose consumption resulted 25 mg/24 h. G group: 67.1 mg/24 h ($p < 0.0001$). Moreover, in this group morphine medium consumption was 5 mg/24 h. L group patients did not require rescue drugs.

Patients' satisfaction (subjective graduated score): L group: very satisfied; G group: satisfied.

Conclusions: Both general and locoregional anaesthesia are effective and reliable techniques for day surgery patients undergoing minimally invasive video-assisted parathyroidectomy. However the locoregional anaesthesia scored better results as regards: collateral effects, consumption of analgesic and other rescue drugs, patients' satisfaction.

23 A table of anaesthetic and surgical interactions with herbal remedies

C. Davies. *William Harvey Hospital, Ashford, Kent, UK*

The prevalence of ingestion of herbal remedies across the world is high. In 1996 over 5000 adverse reactions were reported to the World Health Organisation. Ingredients of herbal medicines vary enormously from maker to maker. Patients think of them as supplements not medication so fail to disclose them even when asked. These remedies may interact with anaesthetic agents or cause problems during the peri-operative period.

We propose to present a poster in form of a table that could be used for quick references for the more commonly used herbal remedies. For each drug, the pharmacological effects, anaesthetic and or surgical peri-operative interactions and time for discontinuation before surgery are stated. An example is shown below.

DRUG: Echinoacea (purple coneflower root)

PHARMACOLOGICAL EFFECTS:

Improves immune system. Treatment of viral, bacteria or fungal infections.

ANAESTHETIC /SURGICAL PERI-OPERATIVE INTERACTION:

Allergic reactions, impairs immunosuppressive drugs. Could impair wound healing with long term use.

TIME DISCONTINUED BEFORE SURGERY:

At least 2 weeks A total of 12 commonly used herbal remedies will be mentioned. A pocket size version of the poster will be available as handouts at the congress.

DRUG: Ephedra (ma huang)

PHARMACOLOGICAL EFFECTS:

Sliming aid. Increases heart rate and blood pressure.

ANAESTHETIC/SURGICAL PERI-OPERATIVE INTERACTION:

Risk of heart Attack, stroke. Interaction with other drugs. Kidney stones peri-operative arrhytmias.

TIME DISCONTINUED BEFORE SURGERY:

At least 24–48 hours.

References

[1] Skinner CM, Rangaheim J. Pre operative use of herbal medicines: a patient survey. BJA 2002; 89(5): 792–5.
[2] Chan TYK. Monitoring the safety of herbal medicines. Drug Saf 1997 Oct; 14(4): 209–15.
[3] Fisher P, Ward A. Complementary medicine in Europe. BMJ 1994; 309: 107–11.
[4] Shaw D, Leon C, Kolev S, et al. Traditional remedies and food supplements: a 5-year toxicological study (1991–1995). Drug Saf 1997 Nov; 17(5): 342–56.
[5] Thien FCK, Leung R, Plomey R, et al. Royal jelly-induced asthma. Med J Aust 1993 Nov 1; 159: 639.
[6] Janetzky K, Morreale AP. Probable interaction between warfarin and ginseng. Am J Health/Syst Pharm 1997; 54: 692–3.
[7] Ernst E. Second thoughts about the safety of St. John's wort. Lancet 2000; 354: 2014–6.
[8] Tsen LC, Segal S, Pothier M, Bader AM. Alternative medicine use in pre surgical patients, Anesthesiology 2000; 93: 148–51.
[9] Kaye AD, Clarke RC, Sabar R, et al. Herbal medications: current trends in anaesthesiology practice – a hospital survey. J Clin Anesth 2000; 12: 468–71.

24 Intravenous midazolam combined with fentanyl and propofol for anesthesia during ultrasound-guided transvaginal oocyte retrieval

M.C. Pace, A. Palagiano, M.B. Passavanti, C. Cammarano, D. Romano, C. Aurilio. *Second University of Naples, Italia*

The aim of this study was to evaluate the efficacy of midazolam with fentanyl, propofol and Paracervical Block (PCB) for ultrasound-guided transvaginal oocyte retrieval.

Methods: 50 women age 26–40 years, ASA I–II, scheduled for oocyte retrieval with ultrasound guidance, were randomized in two groups to receive anesthesia with either iv propofol 1.5–2 mg/kg (Group P, n = 25) or the combination of midazolam 0.05 mg/kg and propofol 1 mg/kg in 2 administrations (first administration before oocyte retrieval, second administration at the time of the oocyte retrieval from the second ovary). Both groups were premedicated with fentanyl 0.1 mg, betamethasone 4 mg and atropine 0.01 mg/kg intravenously, followed by PCB with mepivacaine 2% 10 ml (5 ml

each side). We monitored HR, RR, NIBP, SpO2 during the surgery. Furthermore we recorded administration of analgesics in postoperative time, side effects, time of discharge and satisfaction rating (unsatisfied–satisfied–very satisfied). In addition pain intensity was evaluated using VAS (0–10) at the end of the surgery, 2 hours later and at discharge. Statistical analysis was performed using SPSS version 12.0 for Windows.
Results: Oocyte retrieval was successful in both groups. The monitored parameters did not show any significant variation. VAS values, side effects and administration of analgesic drugs in postoperative period were not significantly different in both groups. On the contrary the time of discharge was shorter (3–4 h vs. 6–7 h) and the patients' satisfaction was statistically better in group MP.
Conclusion: Sedation with midazolam combined with propofol, during oocyte retrieval, reduces the dosage of propofol and the time of discharge from hospital and results in a better patients' satisfaction.

25 The prophylactic antiemetic efficacy of betamethasone vs droperidol in gynaecological day-surgery

M.B. Passavanti, M.C. Pace, L. Pace, P. Sansone, C. Cammarano, A. Palagiano. *Second University of Naples, Italy*

The aim of this study was to compare the antiemetic effect of betamethasone and droperidol administered in premedication in patients undergoing diagnostic laparoscopy.
Materials and Methods: After informed consent 72 patients, aged 18–30, ASA I–II, were recruited in this study. All patients received TIVA with atropine, fentanyl, propofol and rocuronium. In premedication patients received either iv betamethasone 4 mg (Group B, n = 38) or droperidol 1 mg (Group D, n = 34). Postoperative Nausea and vomiting (PONV) on a 3-point scale (0 = none, 1 = nausea, 2 = vomiting) and the administration of additional doses of antiemetic drugs were evaluated during 8 h postoperatively.
Results: There were no significant differences between group B and group D with respect to surgical time, anesthetic doses and side effects. The incidence of PONV during the first postoperative period (0–4 h) was comparable in both groups (2% group B vs 3% group D), but late emetic episodes (4–8 h) were significantly different in both groups (12% group B vs 23% group D). The administration of additional doses too shows the same results (2% group B vs 10% group D).
Conclusion: The administration of betamethasone in premedication reduces both the early episodes of PONV and the incidence of late PONV (4–8 h) that means lower administration of additional doses of antiemetic drugs during 8 h postoperative period.

4. Management

Oral presentations

61 13 Years of Day Surgery

A. Machardy. *Ballarat Day Procedure Centre, Albury, Australia*

This paper is based on data from Albury Day Surgery, NSW, Australia, which was built and opened in 1992 and the changes that have occurred with the case mix during this period. The centre opened on the 10th August 1992, and operated on the first patient, the Day Surgery was then a 2 theatre, 10 bed first stage recovery, 10 chair 2nd stage recovery free standing centre in a rural area.
Over the first 5 years our theatre cases were approx 1200 to 2000 per year and where limited to small cases:
– Dental
– D&C
– Bccs
– IVF
After the first 5 years of operating, more extensive procedures were being introduced this was due to the gradual acceptance of "Day Surgery". During this period we promoted the benefits of Day Surgery to surgeons:
1. Fast Theatre turnaround time
2. Cost savings for patients
3. More patient contact
Surgeons started to embrace the benefits of Day Surgery, changing our case mix to a wider range of procedures with excellents outcomes:
– Arthroscopy Menicectomy, Shoulder Repairs
– Nerve Repairs, Rhinoplasty
– Laparoscopic Burch Colpo suspension
– Facial implants, Oral
– Cataracts, Squint Repairs
– Tendon Repairs, Microsurgery
– Lap Hernias, Laparoscopy
– Vasectomy Reversal
– Endoscopy
– IVF
Albury Day Surgery has evolved over the past 13 years by:
– Working with Surgeons
– Embracing new technology
– Multi Skilling staff
– Education
Today Albury Day Surgery has 3 theatres, 14 bed first stage, 14 chair 2nd stage recovery areas, IVF lab, and operates on over 5000 patients per year, and has a profitable case mix.

62 Day Surgery & oncology

A. Machardy. *Ballarat Day Procedure Centre, Albury, Australia*

Ballarat Day Procedure Centre, Victoria, Australia, opened March 2002, 3 theatres, 14 bed 1st recovery, 14 chair 2nd stage recovery, multi surgical day surgery. Free standing purpose built centre also has a IVF and Path labs.
After 18 months of operating we identified the need for Day Oncology. Mixing day oncology patients with surgical patients was a concern, to benefit all patients we extended the existing building.
The new extension consisted of:
1. 12 Chair Day room area
2. Private room with 3 beds
3. Clean & Dirty utility rooms
4. Sister station & Kitchen
5. Disabled toilet and shower
6. Four doctors consulting rooms
7. Office and reception areas

Prior to the extension the centre completed 3000 patients per year and 60% occupancy, the surgical side of the business was in its infancy and would grow, the infrastructure of the business was capable of catering for the growth in the surgical area and cater for the oncology patient.
The extra oncology patient numbers were 3600 for the year bringing the centre to a total of 6600 patients per year.
We increased staffing levels by 2.5ft and streamlined the staff and patients flow. Oncology patients are appointment based, arriving 15 minutes prior to admission, the reduction in waiting times was welcomed by patients.
Utilization and training of surgical nurses in the oncology area enabled the Centre to have multi-skilled staff for both areas.
The results from this Oncology extension have been exciting and have enabled the Day Surgery to:
1. Expand Services
2. Multi Skills Staff
3. Deliver a superior service
4. Improve patient & Staff flow
5. Improve occupancy and profit levels

63 Innovation in performance review system

L. MacMillan. *Monserrat Day Hospital, Brisbane, Australia*

Starting as a private Endoscopy practice in 1996 with just six staff and one site, Montserrat has now grown to a Day Hospital organisation with forty-five staff, three sites and specialists from various areas utilize our theatres. Staff recruitment places a significant financial burden on an organisation of Montserrat's size and therefore it is essential to attract staff that fit the culture.
Issues:
- High staff turnover rate
- Need to overhaul the recruitment/selection process

Objectives:
- Higher staff retention rate
- Develop a Strategy to measure and monitor staff performance.

Method used:
- Processes developed revolves around Key Result Areas (KRAs).
- KRAs start as an overview of objectives needing to be fulfilled.
- This forms a Position Description.
- Interviews are conducted by two managers, questions are derived from the KRAs.
- Six month probation period is policy for all new staff (enables the employee and Montserrat to assess their position and it became evident early on that three months is not long enough to assess a new employee's 'fit', particularly as we have three separate Hospital sites that staff work across).
- Position Description, which was based on the KRAs, is expanded into a Role Definition.
- Employee's performance is monitored and measured through Key Performance Indicators (KPIs) which form the Role Definition. Specifically the role definition:
  – Establishes priority of the KRAs,
  – Develops key strategies to achieve KRAs,
  – Identifies delivery timeframes,
  – Nominates resources required, and
  – Outlines the action steps the Manager feels necessary.
- Role Definition is negotiated by both parties (ensuring it is realistic and achievable), reviewed quarterly or when there is change in the position's direction.

- Employee reports back to the Manager on the KRAs, fortnightly. Their report identifies:
  - If the KRA has commenced or not,
  - What action steps have been achieved
  - Outcomes to date

Outcome:
- Report is a working document demonstrating achievements and a highly successful tool for measuring performance.
- Within the probation period, a group of employees is nominated to conduct a 360 degree appraisal/review.
- Results are graphical presented which visually compares the individual's ratings to their colleagues. Results are provided in a feedback report (based on the KRAs).
- Conducting the process before the end of the probation period provides time to improve before employment confirmation.

64 Managing multi-site Day Surgeries in Australia

L. MacMillan. *Monserratt Day Hospital, Brisbane, Australia*

There are 243 Day Surgeries spread throughout Australia. Most are privately owned by Doctors working within the Day Surgery, and most rely financially on contracts with the private Health funds. Approximately 30% of all private procedures for 2003/2004 were performed at Day Hospitals.
The Montserrat groups of private Day Hospitals are located across three Brisbane sites in Queensland, and have been operational since 1996. I was fortunate enough to drive the design and development of each and now have a forth currently underway. My career has seen me work my way from an Endoscopy Nurse, to Charge Nurse, to Practice Manager and have now fulfilled the role of CEO for 3 years. The role as CEO in this environment is extremely diverse and many 'hats' must be worn throughout the day.
Major Issues to deal with externally:
- Saturation of the market with Day Hospitals
- Contracting with Health funds
- Sourcing Medicos to utilize the operating theatres
- Recruitment of Gastroenterologists
- High expectations of accrediting Body – Australian Council of Health Care Standards

Major Issues to deal with internally:
- Managing growth and change
- Retaining Staff
- Governance issues
- Risk
- Expectations with medical records reporting
- Pressure on internal resources in alignment with budget
- Multi-skilling staff

Rely on for communication:
- Sitting on external committees
- Networking with other Facilities
- Benchmarking
- Memberships of organisations
- Support groups

I would like to share my years of experience of this specialised area with you.

65 The streamlined clinical pathway

S. Kleinhans. *Montserrat Day Hospitals, Queensland, Australia*

Objective: To respond to our customers' feedback by reducing the time they spend in our facility we set the following Key Performance Indicators:
- To have 80% of procedure patients in the procedure room within ten minutes of their appointment time.
- To discharge 80% of our patients within 1.5 hours of their appointment time.

Methods used: In administration, we had to upgrade our computer system, streamline our bookings procedure, set up a call centre to handle bookings across 3 sites, develop an efficient dictation system and improve the billing process.
In the clinical area we reviewed our clinical pathway forms, changed the admission process, reviewed the sedation drugs we were using and started using carbon dioxide to inflate the bowel rather than air.
Results:
- The total facility times are down to an average of 1.8 hours.
- 90% of our patients are now in the procedure room within the ten minutes required.
- Our administration and clinical staff have learned to work as a team to achieve these goals and there is friendly competition between the 3 sites to see who does the best job.
- Our most recent patient satisfaction survey reflects a positive change.

Conclusion: By using continuous quality improvement strategies and change management it was possible to improve the service we provide to our patients and in so doing create efficiencies in the business.

66 Australian Bali memorial eye centre, the project

E. Zambotti. *Lions Eye Institute of Western Australia, Australia*

The terrorist attack in Bali on the 12th October 2002 was a great shock to the peoples of Australia and Indonesia. The Australian Government and Australian people were prompt and generous in providing assistance for the benefit of all casualties both Australian and Balinese.
To this end it was decided by the Australian Government to assist in establishing a memorial community eye centre for the Balinese people.
The Australian Bali Memorial Eye Centre will be a stand-alone facility constructed by Ausaid and managed jointly by the Bali Provincial Department of Health and the John Fawcett Foundation.
The new centre will expand the scope of existing work of restoring eyesight to the Indonesians free of charge undertaken by an Australian Mr John Fawcett in Bali since 1989. The centre will also provide training for Ophthalmologists and Allied Health Professionals which will increase the number of Indonesian doctors able to perform cataract and implant surgery.
This paper will examine how cultural differences can be overcome to allow an International body of personnel to assist in the construction, establishment and operation of a centre which will provide total eye care to the poor of Indonesia while at the same time establish links to major teaching hospitals in Australia. I will also discuss the ongoing commitment of the John Fawcett Foundation in this project and what long-term strategies must be put in place by the Bali Department of Health to generate revenue to meet future operating costs.

67 Building and setting up an Ophthalmology Day Surgery Centre

E. Zambotti. *Lions Eye Institute of Western Australia, Australia*

Day Surgery today in Australia accounts for 70% of all operating cases and has become a very competitive environment. In the field of Ophthalmology this is particularly so.
Designing and building a private facility presents unique challenges, and requires a team approach if you are going to have a successful business. Patient care must be your priority when making any decisions during your planning and designing stage. Advanced technology comes at a cost and one of the main challenges is to build a centre that offers the very best patient care and is cost effective. High volume, rapid turnover of mainly healthy patients should be one of your primary strategies. Thorough pre planning and critical analysis prior to building cannot be over emphasised. Even if your centre is "not for profit" it is mandatory to make a profit as this will assist you in any future developments and funds may be transferred into areas such as research and development.

This paper will look at what is required for a successful Ophthalmic Clinic, Day Surgery and Laser Vision centre to operate in this very competitive environment.

68 Laparoscopic gastroplasty for obesity: outpatient versus inpatient management

B. De Waele, M. Lauwers, Y. Van Nieuwenhove, G. Delvaux. *Academic Hospital Vrije Universiteit Brussel, Belgium*

Laparoscopic adjustable gastric banding (LAGB) has recently been introduced as an ambulatory procedure. In this prospective study we compared 25 patients undergoing LAGB in an ambulant setting with 25 controls who preferred the same procedure to be done in a typical 2-day hospital stay. The aim of the study was to identify factors which incited to an overnight stay after a gastric banding.
Results: Data from patients with an ambulatory LABG versus inpatient controls: age (years): 33.3±2.1 vs. 41.7±1.9 ($p=0.004$, S); gender (female/male ratio): 23/2 vs. 18/7 ($p=0.06$); BMI (kg/m^2) = 40.0±0.9 vs. 40.6±1.1 ($p=0.72$); operating time (minutes): 89.0±3.1 vs. 97.2±5.8 ($p=0.22$); hospital–home distance (km): 22.4±3.2 vs. 21.7±3.6 ($p=0.88$); co-morbidities (number per patient): 1.68±0.74 vs. 2.40±0.87 ($p=0.003$, S); and previous abdominal surgery: 0.56±0.14 vs. 0.64±0.15 ($p=0.70$). The total cost of the procedure was 1850 vs. 1983 Euro. The mean time lapse between the end of the operation and discharge from hospital was 9.1±0.3 hours in the ambulatory group and there were no readmissions.
Conclusion:
1. LAGB for obesity may be performed on an ambulatory basis without complications.
2. Only advanced age and higher co-morbidities contributed significantly to the choice of an overnight stay for LAGB.

69 Surgical training in day surgery units

A. Bjorlin. *Danderyds Hospital, Stockholm, Sweden*

In 1996, due to changes in the organization of Stockholm's health care, the ENT clinic at Danderyd's Hospital became a day surgery unit, linked to Karolinska Hospital. The fusion of two full-equipped ENT clinics ended up in one large ENT department, consisting of one high specialized unit (at the Karolinska Hospital) and one unit at Danderyd's hospital, with an out-patient clinic and day-care surgery. Since Karolinska Hospital is a university hospital with educational responsibility, it became necessary for residents to be trained in basic surgery at Danderyd's hospital. This was in spite of the day surgery criteria, which in general require skilled surgeons. A number of changes were made in order to obtain safety during training. The most important changes were made in the weekly schedule, allowing one of the senior staff extensive flexibility in order to be free for tutoring both at surgery and at the policlinic. The tutoring position rotated between the senior physicians during the week. A readily available tutor resulted in more opportunities for the residents to increase their surgical skill with more advanced cases, but also to perform a great number of basic surgery. Mean-time the senior staff performed more advanced surgery, including soft tissue surgery, middle ear surgery and functional endoscopic sinus surgery, with residents as assistants. A prerequisite for this organization is, as in our case, that all staff, including nurses and anaesthesiologists, are positive to education and regard it as one of the most important tasks for the unit. When evaluating training of residents in a day care unit, we found that the residents were very pleased with the changes and that after half a year at the day surgery unit they were able to independently perform all basic surgery required and had knowledge of and had tried more advanced surgery under supervision. Still we managed to keep the production goals.
During the same period evaluation of patients' satisfaction with the treatment and results did not decline. No serious adverse events involving residents were reported. Our conclusion is that it is possible to develop an organization including surgical training in day surgery units with unchanged high quality.

70 23 hour surgical short stay facility: Improving the service

R. Aguilo, L. Wilson, A.M. Bhargava. *King George Hospital, Essex, UK*

Background: A 23-hour surgical admissions pathway was recently implemented in our District General Hospital in order to (i) reduce the 25% of scheduled operations cancelled on the day of admission, (ii) decrease the length of, and numbers on, the in-patient waiting list, and (iii) to improve Day Unit bed use. This relies upon using ring-fenced beds for a 23-hour stay.
Objectives: We audited pathway utilisation, achievement of shortened stay, and the effect on cancellation rates.
Methods: We audited the progress of 46 patients through the pathway during June and July 2004. Appropriate allocations, the number and reasons for cancellation, length of stay, and achievement of a new system of nurse-led discharge were assessed.
Results:
- 30% achieved a stay of 23 hours
- 42% stayed for 24–30 hours
- 18% stayed for 31–48 hours
- 9% stayed for >48 hours
- 72% of patients could have achieved a stay of 23 hours if the doctors' post-operative instructions were clearer. Seven patients were incorrectly allocated and 2 patients were cancelled.
- 70% of patients had a successful nurse-led discharge.
- In-patient bed unavailability dropped from 142 to 24 compared to the preceding year.

Conclusions: Nurse-led discharges are crucial in realising a 23-hour discharge protocol. The ability to carry out operations within a 23-hour stay facility offers the solution to long waiting list numbers and times, and negates a 3 to 4 day in-patient stay. Full utilisation of the pathway would result in an extra 9 in-patient beds being freed-up per day in our District General Hospital.

71 Why a medical director of an ambulatory surgery unit should be interested in value analysis and process reengineering

M. Constantini, G. Bettelli. *Hospital University of Pavia, Italy*

To save money is always important, all the more so in leaner periods. Current circumstances are demanding: many Italian and European Health Organizations have recently encountered financial difficulties, and this trend seems to be extended at world level.
A rise in value is a must today in many human activities, and medicine and surgery are no exception: Health Organizations pay their "non conformities" in terms of rework loops until Customer satisfaction is obtained, if at all. Instead, the relief of unnecessary costs may have ultimate importance, resulting in a combination of:
- higher benefits for the Organizations (in terms of costs and operation safety)
- higher value for their customers, the patients (in terms of safety, treatment quality and costs)
- potential growth in the "market" of new therapeutic approaches
- competitive advantage for reengineered Health Organizations.

Successful organizations develop performance management plans that sort out not only by identifying customers, stakeholders, and their needs, but also by clearly pinpointing their processes and choosing competent and responsible process owners. Process owners in Day Surgery – in their effort to reengineer and revalue their processes – should rely on adequate infrastructures and facilities, triggering new channels of interactions among clinic, technology, architecture organization, economics, etc. The contribution, which develops and updates a contribution to the 5th IAAS Congress (International Association of Ambulatory Surgery) in Geneva,

This paper will look at what is required for a successful Ophthalmic Clinic, Day Surgery and Laser Vision centre to operate in this very competitive environment.

68 Laparoscopic gastroplasty for obesity: outpatient versus inpatient management

B. De Waele, M. Lauwers, Y. Van Nieuwenhove, G. Delvaux. *Academic Hospital Vrije Universiteit Brussel, Belgium*

Laparoscopic adjustable gastric banding (LAGB) has recently been introduced as an ambulatory procedure. In this prospective study we compared 25 patients undergoing LAGB in an ambulant setting with 25 controls who preferred the same procedure to be done in a typical 2-day hospital stay. The aim of the study was to identify factors which incited to an overnight stay after a gastric banding.
Results: Data from patients with an ambulatory LABG versus inpatient controls: age (years): 33.3±2.1 vs. 41.7±1.9 ($p=0.004$, S); gender (female/male ratio): 23/2 vs. 18/7 ($p=0.06$); BMI (kg/m^2) = 40.0±0.9 vs. 40.6±1.1 ($p=0.72$); operating time (minutes): 89.0±3.1 vs. 97.2±5.8 ($p=0.22$); hospital–home distance (km): 22.4±3.2 vs. 21.7±3.6 ($p=0.88$); co-morbidities (number per patient): 1.68±0.74 vs. 2.40±0.87 ($p=0.003$, S); and previous abdominal surgery: 0.56±0.14 vs. 0.64±0.15 ($p=0.70$). The total cost of the procedure was 1850 vs. 1983 Euro. The mean time lapse between the end of the operation and discharge from hospital was 9.1±0.3 hours in the ambulatory group and there were no readmissions.
Conclusion:
1. LAGB for obesity may be performed on an ambulatory basis without complications.
2. Only advanced age and higher co-morbidities contributed significantly to the choice of an overnight stay for LAGB.

69 Surgical training in day surgery units

A. Bjorlin. *Danderyds Hospital, Stockholm, Sweden*

In 1996, due to changes in the organization of Stockholm's health care, the ENT clinic at Danderyd's Hospital became a day surgery unit, linked to Karolinska Hospital. The fusion of two full-equipped ENT clinics ended up in one large ENT department, consisting of one high specialized unit (at the Karolinska Hospital) and one unit at Danderyd's hospital, with an out-patient clinic and day-care surgery. Since Karolinska Hospital is a university hospital with educational responsibility, it became necessary for residents to be trained in basic surgery at Danderyd's hospital. This was in spite of the day surgery criteria, which in general require skilled surgeons. A number of changes were made in order to obtain safety during training. The most important changes were made in the weekly schedule, allowing one of the senior staff extensive flexibility in order to be free for tutoring both at surgery and at the policlinic. The tutoring position rotated between the senior physicians during the week. A readily available tutor resulted in more opportunities for the residents to increase their surgical skill with more advanced cases, but also to perform a great number of basic surgery. Mean-time the senior staff performed more advanced surgery, including soft tissue surgery, middle ear surgery and functional endoscopic sinus surgery, with residents as assistants. A prerequisite for this organization is, as in our case, that all staff, including nurses and anaesthesiologists, are positive to education and regard it as one of the most important tasks for the unit. When evaluating training of residents in a day care unit, we found that the residents were very pleased with the changes and that after half a year at the day surgery unit they were able to independently perform all basic surgery required and had knowledge of and had tried more advanced surgery under supervision. Still we managed to keep the production goals.
During the same period evaluation of patients' satisfaction with the treatment and results did not decline. No serious adverse events involving residents were reported. Our conclusion is that it is possible to develop an organization including surgical training in day surgery units with unchanged high quality.

70 23 hour surgical short stay facility: Improving the service

R. Aguilo, L. Wilson, A.M. Bhargava. *King George Hospital, Essex, UK*

Background: A 23-hour surgical admissions pathway was recently implemented in our District General Hospital in order to (i) reduce the 25% of scheduled operations cancelled on the day of admission, (ii) decrease the length of, and numbers on, the in-patient waiting list, and (iii) to improve Day Unit bed use. This relies upon using ring-fenced beds for a 23-hour stay.
Objectives: We audited pathway utilisation, achievement of shortened stay, and the effect on cancellation rates.
Methods: We audited the progress of 46 patients through the pathway during June and July 2004. Appropriate allocations, the number and reasons for cancellation, length of stay, and achievement of a new system of nurse-led discharge were assessed.
Results:
- 30% achieved a stay of 23 hours
- 42% stayed for 24–30 hours
- 18% stayed for 31–48 hours
- 9% stayed for >48 hours
- 72% of patients could have achieved a stay of 23 hours if the doctors' post-operative instructions were clearer. Seven patients were incorrectly allocated and 2 patients were cancelled.
- 70% of patients had a successful nurse-led discharge.
- In-patient bed unavailability dropped from 142 to 24 compared to the preceding year.

Conclusions: Nurse-led discharges are crucial in realising a 23-hour discharge protocol. The ability to carry out operations within a 23-hour stay facility offers the solution to long waiting list numbers and times, and negates a 3 to 4 day in-patient stay. Full utilisation of the pathway would result in an extra 9 in-patient beds being freed-up per day in our District General Hospital.

71 Why a medical director of an ambulatory surgery unit should be interested in value analysis and process reengineering

M. Constantini, G. Bettelli. *Hospital University of Pavia, Italy*

To save money is always important, all the more so in leaner periods. Current circumstances are demanding: many Italian and European Health Organizations have recently encountered financial difficulties, and this trend seems to be extended at world level.
A rise in value is a must today in many human activities, and medicine and surgery are no exception: Health Organizations pay their "non conformities" in terms of rework loops until Customer satisfaction is obtained, if at all. Instead, the relief of unnecessary costs may have ultimate importance, resulting in a combination of:
- higher benefits for the Organizations (in terms of costs and operation safety)
- higher value for their customers, the patients (in terms of safety, treatment quality and costs)
- potential growth in the "market" of new therapeutic approaches
- competitive advantage for reengineered Health Organizations.

Successful organizations develop performance management plans that sort out not only by identifying customers, stakeholders, and their needs, but also by clearly pinpointing their processes and choosing competent and responsible process owners. Process owners in Day Surgery – in their effort to reengineer and revalue their processes – should rely on adequate infrastructures and facilities, triggering new channels of interactions among clinic, technology, architecture organization, economics, etc. The contribution, which develops and updates a contribution to the 5th IAAS Congress (International Association of Ambulatory Surgery) in Geneva,

investigates specifically new inputs in facilities design, and in day surgery facilities design in particular, coming from the two great contemporary drives: the «nouvelle approche» (new approach) and the unprecedented change in work organization. The "new approach" (a performance and customer/user oriented approach) originates as a tool to easy international trade (ISO standards), as a mean of protection of European citizens/customers from common market risks (Building directive 89/106 and in European harmonized standards), and as a way to enhance marketing abilities in mature markets as well. The "great changeover" on the other side is investigated with growing interest by major businesses and management schools: the Harvard Business School, the MIT Business Departments and the London Business School among others pinpointed process re-engineering as "the" way to improve efficiency of organizations and efficacy in customers' substantial satisfaction and are evaluating benefits and consequences in order to increase competitiveness (Let's not forget that Thai magazines advertise, aside Coronary heart-bypass, Hernia Surgery at 489$, Cataract extraction at 556$, and other DS surgery at fixed price). Day Surgery structures and organization are strictly part of the business, and the Patient/Customer is the focus both of medical treatment and of engineering/architectural solutions: patients in fact appreciate with increasing accuracy complex parameters beyond therapeutic efficacy, such as staff dedication, stress reduction, time-waste decrease, hospital space appeal and functionality. On their side, DS facility managers and operators are confronting with concepts such as global costs (instead of buildings costs or "instant" running costs) and value (instead of price). Hence, value is the reason why – more than ever – planners' job is to evaluate and define "when", "where" and "how" activities and processes should be allocated in view of safe operation, full work flow and patient's comfort. A few cases, with updates, will be presented and shortly discussed as result examples of this approach. Moving from those cases, a basic concept will be stressed and developed. "Briefing" with facility managers, medical directors and operators, along with a deep comprehension of the processes, is the key phase of the design process of hospitals in general and of Ambulatory Surgery facilities in particular. A lengthy, accurate briefing deeply involving the staff is requested: the clinician is the key source, and engineers and architects should tailor on their shoulders (and patients' shoulders) a facility working as a safe, agreeable, friendly and efficient "machine": the Ambulatory Surgical Centre design has to be doctors' and managers' design as well as the architect's and the engineer's.

72 Evaluation of the reasons for cancelling outpatient surgery in a multidisciplinary unit of a public university hospital

H. Logerot, H. Noel, M. Frank-Soltysiak, J. Langloys. *Bicêtre University Hospital, France*

Objective: To analyse the reasons for cancelling interventions in an exhaustive four-year series, and to propose a system for typing the causes identified.
Method: In cases of cancellation, before or after the arrival of the patient, information concerning the cause of cancellation was systematically collected. We analysed changes in cancellation rates and typed the causes identified.
Results: Cancellation rate increased from 10.5% in 2001 to 14.9% in 2004 ($p < 0.001$). We analysed about 1460 cancellations, which we classified according to their cause: 1) medical reasons (36%), 2) patient-specific reasons (34%) and 3) organisational reasons (29%). The proportions of cancellations for each type of reason varied: patient-specific reasons decreased whereas medical and organisational reasons increased in frequency.
Discussion: The mean proportion of cancellations was 12.4%, consistent with reported cancellation rates. The rise in cancellations in this period may be due to improvements in recording, increases in activity and the probable broadening of indications. This probably accelerated treatment, reducing the time available for information and explanation, which are indispensable. Furthermore, the broadening of indications and confidence in the structure and its functioning may have led to the registration of more fragile patients, resulting in secondary cancellations. Many cancellations had mixed causes (organisational and patient-specific). For example, a "patient-specific" cancellation might be due to insufficient explanation or patient negligence.
Conclusion: Study of the causes of intervention cancellation, particularly for organisational causes, is essential to assessment of the structure's performance. Periodic analysis of this indicator therefore constitutes a key means of improving service quality.

73 A national approach to improving Day Surgery

S. Penn. *NHS Modernisation Agency, Leicester, UK*

In September 2002, the British Department of Health launched a Day Surgery Programme through the NHS Modernisation Agency, to improve the quality and quantity of day surgery being performed nationally. The Programme has now been running for two years. As the National Programme Lead for Day Surgery, the author of this paper will describe the approach taken as a joint strategy between the NHS, Modernisation Agency and Department of Health to assist all Trusts in improving their day surgery rates with the aim of 75% of all elective surgery being carried out on a day case basis as described in the NHS Plan.
The objectives of the National Strategy were, and continue to be, to:

- Support Strategic Health Authorities (SHAs)/Trusts/Primary Care Trusts in delivering the levels of day surgery contained within Local Delivery Plans and therefore make a significant contribution to meeting the access targets.
- Improve patient care, by ensuring patients are treated by skilled staff at the right point in the system.
- Increase the efficiency of the NHS by facilitating the appropriate shift from inpatients to day surgery, outpatients and primary care and by increasing the productivity of day surgery units.
- Support Clinicians and staff to adopt best practice in Day Surgery.

The Programme was clinically led. The initial steps taken were to appoint clinical champions within each SHA and work began to develop plans to promote day cases across whole health economies. It was agreed that SHAs should determine the right approach for their sectors with their Clinical Champions and local health economies. Support from the Modernisation Agency Day Surgery Team was then tailored to local needs. In this way it was felt that the programme could be owned more locally. The Day Surgery Team gave specific intensive support to a few Trusts where significant gains could be made.
The achievements of the Programme have been to develop tools for SHAs and Trusts to use locally to help them ascertain baseline levels, improvement tools, the publication of a Good Practice Guide, the hosting of national and local specific speciality events, and a leadership programme for the clinical champions.
Improvements to day surgery have been made and the main benefit of a national approach has been to raise day surgery on managerial and clinical agendas.
As from April 2005 the Modernisation Agency work will focus on leading edge thinking around elective care and will move away from hands-on improvement. However, the work that has been done over the last two years will continue as it will managed locally by the SHAs, the clinical champions and the DH.

74 Follow-up study: Measurement of effective learning in distance education for nurse Continuing Professional Development (CPD)

C. Castoro, C.A. Drace, M. Zucchetto, S. Merigliano. *University of Padua and TRASTEC, Scpa, Padova, Italy*

The nursing profession is one of the categories of health workers which requires constant updating of knowledge and clinical practice in order to administer "state of the art" medical care to patients. Many Continuing Medical Education (CME), or Continuing Professional Development (CPD), events are aimed at this category. Italy is the only

European country whose national CME program includes physicians, nurses and other health professionals, public and private. In some countries, like the UK and the USA, nurse CPD is handled by nursing professional organizations while other countries have no mandatory programs for the nursing profession. Distance education for CME has, by now, become an alternative to the traditional congress or convention for satisfying professional development requirements. It allows interactive self-paced learning as well as virtual classroom environments either at home or in the workplace. Distance education has been shown to be an effective mode of delivery nursing education. Access to CPD is a challenge for nurses who have work and family responsibilities and may live in unserviced areas. The SkyMed Project, co-financed by the European Space Agency, developed a new teaching and communication model for medical distance learning and for CME. The project consortium developed course contents in collaboration with the International Association for Ambulatory Surgery and the Italian Federation of Day Surgery (FIDS). "Day Surgery Nursing" was the first experimental course of the SkyMed project. The computer based training course (CBT) took place fall 2003 in 7 multimedia classrooms at the main hospitals of the Veneto Region, Italy.
Students met 2 hours, 2 afternoons a week for self guided participation and study. The foreseen duration of the course was 16 hours and 34 nurses participated in the SkyMed CBT. Upon completion of the course, participants were asked to complete a questionnaire evaluating certain aspects of the course and were interviewed over the telephone. Participants expressed enthusiasm about the course and felt that others would benefit from this course (score 3.17 and 3.24, respectively, scale 1–4: 1 = strongly disagree – 4 = strongly agree). Analysis of completed questionnaires indicated an overall acceptance of the learning model and usefulness of distance education (score 3.52 and 3.61, respectively). On the other hand, difficulties were found in the nature of the contents; they were either too medically rather than clinically oriented or the cultural aspect varied too much from the local nursing situation (Day Surgery nursing in UK vs. that in Italy). If a CME program is to be successful, there must be active participation of all involved, irrespective of the educational format, with the presentation of up-to-date, clinically relevant material. Success can be gauged in terms of the extent to which the knowledge gained is retained (immediate and long-term), and applied in the health care setting with measurable improvement in patient health or workplace dynamics. In order to ascertain the effectiveness of the SkyMed nursing course a follow-up study is underway. This study will involve a questionnaire and telephone interviews aimed at assessing the application of concepts and practical instruction acquired after completion of the course. Results will be presented.

References

[1] Atack L, Rankin J. A descriptive study of registered nurses' experiences with web-based learning. J Adv Nurs 2002; 4: 457–65.
[2] Suter Sanzaro et al. (quoted in Distance learning: Using the Web as a Tool for Interactive CME. Kevin D. Horn MD. University of Pittsburgh Medical Center, Pittsburgh, PA, Nov 8, 1996).

75 UNE-EN ISO-9001-2000 Certificate for a major ambulatory surgery unit

M. Prats Maeso, L. Hidalgo, J. Barja Sanchez, X. Suñol Sala.
Hospital de Mataró, Spain

Background: Since the beginning of the activity of our Major Ambulatory Surgery Unit (MASU), Quality Assesment Programme has been reviewed in 1997 and 2001. Quality indicators were adequate in 2003 to obtain in 2004 the ISO 9001/2000 certificate.
Material and Method: All the processes of the surgical procedures done in the MASU were revaluated in 2003. Quality indicators, that have been used since 1994, were modified and a new ones were included, in order to get the process completely. Objectives for every indicator were determinated.
Results: The process in the MASU was divided in five:

- Selection of the patients, that includes the selection by the surgeon, selection by the anesthesiologist and surgical daily programme. Indicators considered were: patients rejected by the anesthesiologist (0.79%), changes in the surgical programme and delay of the operation after surgical indication by the surgeon.
- Inpatient process: cancellations (1.41%), time for the patients waiting for surgery over 60 min (7.9%) and events in the inpatient process.
- Operative process: Recovery stay under 90 min (3.6%).
- Discharge process: postoperative mean stay (102 min) and early admissions (1.3%).
- Postoperative follow-up: reoperations (0.25%), emergency evaluations (2.7%), outpatient evaluations (1.6%), late admissions (0.2%), postoperative pain under 3 measured by analogical scale of pain (5.2%) and analysis of the satisfaction questionnaire of the patients.

Conclusions: The above expressed methodology has allowed us to reach the Quality Certificate UNE-EN-ISO-9001/2000 in 2004.

Posters

76 Oncological management in hospital based ambulatory surgery

M. Cherubini. *Azienda Ospedaliero Universitaria di Trieste, Italy*

Objective:
1. To value the possibility to perform a neoplastic screening in an ambulatory surgical unit.
2. To value a group of oncological lesions excised.

Methods:
1. The patients sent for an consultancy or ambulatory oncological clinical visit were examined. Signs were searched referred to neoplastic screening,with the clinical exams prescription, cytological and/or bioptical assessment. Endoscopy with histology, ultrasonographically guided biopsy, bronchoscopy and biopsy were prescribed and executed in short.
2. The suspected lesions were removed and histology was performed. In both the groups the risk factors and the staging were defined.

Results: The checked lesions were: breast (176), colorectal (79), lung (29), stomach (15) cancers. They were quickly treated after histology and stadiation. The 2nd group concerned 109 patients directly operated in ambulatory surgery for suspected neoplastic lesions. These were subdivided into: periareolar non Hodgkin lymphomas and pseudolymphomas (7), glomus tumours (12), schwannomas and Abrikossoff's tumours (7), non melanomas and melanomas (57), Merkel tumours (2), metastatic excisions (22), Kaposi's sarcomas (2).
Conclusions: It is highlighted the usefullness of the neoplastic lesion evaluation and stadiation before operation. There is the possibility of widening the volume of surgical traditional operations with oncological diagnostic and therapeutic procedures, in order to obtain cytological or histological exams, the stadiation, the operative risk factors evaluation. The direct biopsies and the excisions of suspected areas are possible and usefull in hospital based ambulatory surgery. All these procedures obtain higher level of patient satisfaction, appropriate selective diagnosis and treatment before admission, the valuation of risk factors, also in the old age, with the reduction of hospitalization and the decrease of the health costs.

77 Ambulatory Surgery and dental hospital Day Unit

P. Thomson. *Newcastle Dental Hospital, UK*

Background: A wide range of patients attend the Oral Surgery Day Unit at Newcastle Dental Hospital. These are mainly fit adults and children for elective dento-alveolar surgery, but there is also a significant number of medically or physically disabled, or dental

phobic patients, requiring comprehensive dental treatment under general anaesthesia.
Methodology: A new purpose-built ambulatory care unit was opened at the Dental Hospital in 1999. A retrospective review was carried out in 2004 to characterise the overall patient base and to quantify operative activity during the period January 1999 to December 2003.
Results: A total of 9217 patients attended during this 5 year period; 53% were female and 47% male. Whilst a very wide age range was observed, between 1 to 83 yrs, the majority of patients were paediatric with 6561 in the age group 1 to 10 yrs. Unsurprisingly, extraction of teeth and dento-alveolar surgery comprised 89% of all procedures, although a gradual fall in numbers was observed over the 5 years. Other oral and maxillofacial surgery cases contributed only 3% overall, but the number of these procedures has risen. Restorative and paediatric dentistry cases accounted for 8% of activity.
Conclusions: Profiling attending patient populations and reviewing activity data helps optimise ambulatory care, and facilitates planning of future service provision.

78 10th Anniversary of the International Association for Ambulatory Surgery (IAAS)

J. Reydelet. *Germany*

Ten years ago at the 1st International & 3rd European Congress on ambulatory Surgery in Brussels (16–17 March 1995) the International Association for Ambulatory Surgery was founded.
The poster is a report about the IAAS history from the constitution till today and describes the different steps in the evolution, the successes within the last ten years and the projects for the future.
An important iconography completes the description and points at the importance of the IAAS particularly at
The background – Chronology of formation
The first executive committee formed 15th March, 1995
The reason why was the association formed?
The achievements of the IAAS
The IAAS work in progress
The present membership
IAAS office
The International Association for Ambulatory Surgery (IAAS) can be reached c/o BADS, 35–43 Lincoln's Inn Fields, London WC2A 3PE, UK.

79 Assessment and evolution after 10 years of activity in ambulatory surgery

R. Mansilla Folgado, D. Sintes Matheu, M. Pijoan Calonge. *Hospital Municipal de Badalona, Barcelona, Spain*

Objective: The AS has initiated its activity in our hospital in 1993, and has been increasing progressively like in the majority of the centres, after ten years of existence. Our objective is to assess the activity and quality indicators of AS analysing the causes of its evolution.
Material and Methods: Out of a total of 15,630 AS operations (during the period 1993–2003), the number and the causes of admission (211 in all), % of them (1.3%), the index of global substitution (44%), the distribution of the specialties and their evolution, have been assessed according to the characteristics of our Hospital.
Results:
Operations number and surgical specialities, 1994–2003:
- Vascular surgery: 23; Urology: 2681;
- Gynaecology: 1105;
- Ophthalmology: 5909;
- Orthopaedic and trauma surgery: 3179;
- General surgery: 2217;
- ENT: 516.

AS admissions 1994–2003 according to the surgical speciality:
- Vascular surgery: 1%;
- Urology: 1%;
- Gynaecology: 23%;
- Ophthalmology: 34%;
- Orthopaedic and trauma surgery: 17%;
- General surgery: 23%;
- ENT: 1%.

Index of global substitution:
- 1994: 17%;
- 1998: 28%;
- 2003: 44%

ADMISSION CAUSES:
- Medical causes: 45%;
- Surgical causes: 33%;
- Anaesthetic causes: 11%;
- Social causes: 11%

Conclusions:
1. Annual increase of the number of AS operations and a progressive diminution of the number of admissions and complications.
2. Very significant increase of Orthopaedic Surgery operations due to the introduction of the percutaneous surgery, that allows to make locoregional techniques of the foot. Ophthalmology, like in most of AS centres, is the specialty with a greater number of operations.
3. The extension of the schedule of the Unit until 9 pm has improved its performance, allowing activity in the afternoon.

80 NHS Elect – a UK approach to improving elective care through partnership

C. Dove, F. Hunter, E. Maher, J. Timpson. *Hospital NHS Elect, London, UK*

The National Health Service (NHS) is losing its monopoly on the provision of publicly funded healthcare. This policy shift challenges the NHS to radically improve productivity while forming partnerships with private healthcare providers. NHS Elect has been established as a network of NHS treatment centres (TCs) to realise the benefits of this new environment.
NHS Elect offers the following support to participating TCs:
- Specialist knowledge and expertise (overseas teams) – Implementing international models of best practice.
- Specialist knowledge and expertise (NHS) – A network of NHS clinicians and managers who have pioneered new models of elective care.
- Model of care – A unified model of care is being developed across the network.
- Accreditation – NHS Elect will operate an accreditation process, assessing progress in implementing improved models of care.
- Links with wider programme – NHS Elect is part of a wider programme of systems reform. Member TCs will be supported in acting as pilot sites for developments in health policy.

The work of NHS Elect to date demonstrates a number of benefits including:
- Improved clinical care and patient experience – Patient satisfaction is high and complication rates low.
- Improved operating efficiency – Streamlining the elective process.
- Access to expert networks – NHS Elect facilitates peer support and expert advice for all members.
- Provision of marketing and branding material.
- Objective accreditation – Enabling members to 'benchmark' their performance against other TCs.

81 The initial experience of ambulatory surgery in Hungary

E.M. Gamal, A. Kovács. *Budaörs Medicla Center, Budaörs, Hungary*

The idea of one day surgery ODS in Hungary was initiated by the Hungarian Association of Ambulatory Surgery (HAAS) in 1997. Since that date the HAAS held three national congresses dealing with the possibilities of introducing this type of surgery

in Hungary, and it lead all the negotiations with the authorities of healthcare, Health Insurance Company and other authorities which are concerned. The HASS provided all partners with the full international information and experience in all aspects of strategy, marketing and organisation. As a result of this, a permission was given to eight centres to begin the activities of ODS. All these centres are free standing centres all over Hungary. A majority of 251 activities were permitted to perform, in the field of general surgery (including proctology), orthopaedics (including arthroscopy and hand surgery), ophthalmology and gynaecology. The leading centre of ODS in Hungary now is the Budaörs Medical centre, which is a free standing centre for ODS and other minimally invasive techniques, which started its activities in February, 2004. Since that date we performed 2500 operations, with no mortality and morbidity. We have a contracted expert staff of 24 specialists, together with the nursing and operation room staff. Our postoperative area consists of 14 surgical beds and we perform ambulatory surgery, 23 hour's surgery and overnight surgery. Our paper is devoted to explain the circumstances of beginning and the strategy of developing ODS in Hungary, together with our safeguards to extend and propose it to other sectors of healthcare in Hungary.

82 Assessment of the satisfaction of professionals with a multidisciplinary outpatient surgery unit

M. Frank-Soltysiak, H. Logerot. *Bicêtre University Hospital, France*

Objective: To measure the satisfaction of professionals with a multidisciplinary outpatient surgery unit (OSU) and to identify dysfunctions in this structure.
Method: We carried out a transverse study of a sample of hospital professionals selected, by drawing lots, from the entire hospital staff (N = 682). An ad hoc questionnaire was developed with the aim of evaluating perception of the service received by the patient, and the organisation of work within the structure. The responses were studied item by item and satisfaction scores were calculated.
Results: The response rate was 58.2%. Of those questioned, 32.5% had already worked within the OSU and 92.5% were aware of its existence at the hospital. The satisfaction score for the service received by the patient was 86.9 (+21.8) whereas that for organisation was 74.4 (+23.1). However, 72.4% of those responding reported dysfunctions (the circuit followed by the medical file in particular). The professionals responding (99%) felt that it was essential for public hospitals to offer this type of activity, which 94% of professionals thought rendered the hospital more attractive to patients.
Discussion: The questionnaire was created from scratch because we were unable to find another evaluation of the satisfaction of professionals with outpatient surgery.
Conclusion: Studies of the perception of professionals constitute an essential element in the assessment of care quality and for correction of the dysfunctions identified. Hospital professionals expressed positive views concerning the service provided to patients and the organisation of this unit, supporting the development of this type of patient management.

83 The development of an Ambulatory Surgery Centre (ASC)

E. Alves, P. Rola, P. Lemos, R. Alegre. *Portugal*

Although non-emergent surgery performed on a day surgery basis is a fast-growing reality in Portugal, there are no independent ASCs operating at this time. In order to provide high quality health services within ambulatory surgery, it is necessary to develop appropriate and specific healthcare units for this kind of services.
The purpose of this poster/presentation is to show how the first independent portuguese Ambulatory Surgery Centre is being developed and becoming a true symbol of innovation in the portuguese National Health Service. It puts emphasis not only in the ASC and its characteristics, but also in all the development and designing phases of this healthcare unit.
In 2003 an initial memo was prepared in order to develop the idea of building the first ASC in Portugal. In this particular case it was meant to be developed by Hospital Geral de Santo António, in Oporto. The mentors of the project decided to study its feasibility and hired and independent external consultant to provide a market study and a financial feasibility study. Both indicated that the project would be of great success for both the Hospital and the National Health Service, but specially for the community it serves.
The studies performed gave the project team the necessary information to both develop the building architecture and production capacity and to project its activity and financial demonstrations. Therefore, the future ASC will be organized in three major units (plus one special recovery unit), with the following structure:

Description	Intervention rooms	Consultation	Others
General Unit	Four major surgical suites and one minor surgery suite	Nine consultation rooms; Special minor surgical suite	Twenty-two recovery cabins; Three treatment rooms
Endoscopy Unit	Two endoscopy suites	One consultation room	Four recovery cabins
Ophthalmology Unit	One major surgery room and one Laser room	Five consultation rooms	Laser for diabetes treatment
Special Recovery Unit	–	–	Ten individual rooms; One treatment room

According to the market study this ASC will be able to perform 16,000 surgeries, 60,000 consultations and 6,500 endoscopies, within reasonable occupancy rates. These are projections made within the area that Hospital Geral de Santo António covers and would have to be revised if it was meant to any other healthcare institution. To develop an ASC every project team should perform the same feasibility studies as in this case because every project has its own specifications and needs according to a different reality.
Also very important are the projected financial results for this ASC. The project team is developing a totally informatics healthcare unit, which together with innovative management methods and differentiated incentive plans will guarantee the necessary productivity and efficiency to provide an investment pay-back period of approximately 3 years. As specified above these achievements would also have to be studied and developed for each specific case by a specialized team.

3. Nursing

Oral presentations

55 Competency development for experienced nurses in Day Surgery

P.M. Christensen, U. Thyssen. *University Hospital Herlev, Copenhagen, Denmark*

Introduction: This competence development project is continuation of a previous competence project, part one May 2003 [1]. The purpose of the first part is to develop a structured training programme for nurses, enabling them to meet the demand of nursing in the day surgery setting. The programme describes the process of competency development for a newly employed nurse within the fields of pre-per- and post operative nursing care. It operates with three educational levels: novice, advanced novice and competent [2].
Purpose: The purpose of the second part of the competency development projects is to develop definitions of competence for the proficient and expert nurse.
This definitions will be used as a tool in performance reviews to ensure the personal and professional development of the nurses in the department. This will ensure that nurses are given recognition for their achievements and are able to develop their competencies further.
Methods and Results: A mono-disciplinary group has identified and systematised the demands of day surgery into two specific competence levels: proficient and expert [2]. These definitions of competence have each been divided in four components, these are:

1. Clinical competence deals with professional and task related functions including the ability of reflection and acquiring new knowledge.
2. Organisational competence deals with the understanding of structural and economical aspects of the organisation and the significance of trainees own efforts to influence the organisation and the multidisciplinary team.
3. Educational competence deals with the guidance and instruction of patients and their relatives together with the ability to share knowledge with the rest of the team.
4. Social and personal competence deals with the ability to associate with other people including communication and co-operation within the health care professions and the ability to conduct oneself professionally and ethically in relation to individual patients and to the profession.

The four components are based on the competence model of Edwarsson and Thomassons [3] which has been adapted to Day Surgery nursing.
The definitions of competence are based on the first Competence Project, part one 2003, and "the successful course for day surgery patients".
It is the responsibility of the nurse to develop their learning and to show documentation on what they learn in order to achieve the proficient and expert competence levels. A competence development scheme or learning contract [4] has been developed as a learning documentation tool to help achieve these levels of competence. The individual nurse is responsible for drawing up this scheme contract under the supervision of an "evaluator".
Conclusion: It is our opinion that establishing definitions of competence for nurses in a Day Surgery unit is an important tool for recruiting and maintaining employees. Furthermore, it allows already experienced employees a way to continue and measure their personal and professional development.

References

[1] Christensen Pia and Thyssen Ulla. Competency development project – part one, May 2003.
[2] Benner Patricia. From novice to Expert – Excellence and Power in Clinical Nursing Practice. Addison-Wesley Publishing Company, 1984.
[3] Edvarsson B, Thomasson B. Kvalitetsutveckling – et manegement perspektiv, Studenterlitteratur; 1991/1992. Lund, Sweden.
[4] Fagermoen Solveig May. Sykepleie i Teori og Praksis. Universitetsforlaget; 1995.

56 The depth of anxiety and the amount of pain and disability felt by patients in the peri-operative period when confronting an operation in a Day Surgery department. A descriptive study

A. Palese, C. Comuzzi, V. Bresadola. *Department of Surgery, University of Udine, Italy*

Background: While many reports have been documented regarding patients' progress following surgery as an in-patient, there is still little information about how patients cope with operations done in Day-Surgery departments.
Aims, Materials and Methods: Patients undergoing day surgery for herniorrhaphy, varicous veins, breast lumps and haemorrhoids were included with the objective of determining the peri-operative depth/intensity of anxiety, pain and disability felt by patients having operations in Day Surgery departments. The patients selected gave their consent to be included in the study and were able to go home after having the operation. Calculations made were: the depth of anxiety and amount of pain (using the Vas scale from 0 = minimum pain or anxiety, to 10 = maximum pain or anxiety), stress factors (Biley, 1989), complications and perceived disabilities in Activities of Daily Living (ADL) at three different times: immediately pre- and post-operatively and again 48 hours after surgery, determined by a telephone conversation.
Results: 145 patients were interviewed, of whom 56.6% (82) were women. Of the total, the average age of the patients was 52.1 years (SD±14.5). In the pre-operative period the patients reported a moderate level of anxiety 4.52 (SD±2.9). Major anxiety producing factors were: a fear of "not being able to tolerate pain", "the outcome", and of "the anaesthetic". In the immediate post-operative period, patients also reported a moderate amount of pain, 1.50 (range 0–7, SD±1.58) and a depth of anxiety at 1.68 (range 0–10, SD±2.81). Those patients who were more anxious in the post-operative period also reported having more pain ($p < 0.001$). There were few disabilities with ADL after 48 hours.
Conclusion: Aspects have emerged which the patients consider significant in the peri-operative period in a Day Surgery department and which do influence the depths of anxiety and the amount of pain felt by the patients. It is relevant and important for nurses to understand the patients' experiences to improve nursing practice.

Posters

57 Visual information for children about anaesthesia

F.L. Dorte, K. Kaltoft. *Ribe County Hospital, Esbjerg, Denmark*

Introduction: In the day-surgery clinic in Esbjerg County Hospital, both the anaesthetic nurses and the anaesthetists hold a pre-operative consultation with the patients. We get a lot of children in our day-surgery clinic and it can be a problem to capture their interest. It is difficult for them to conceive what the equipment and sounds of an operating theatre are like, as most of them have never experienced these before. As children learn best from personal experience and seeing things for themselves, we have decided to supplement the pre-operative consultation with visual information.

Aims:

- To make children feel more at ease in unfamiliar surroundings.
- To help parents prepare their children for surgery.
- To make the nursing care in day-surgery clinic more efficient and effective.

Material: A film about the course the course of events for a child, from arrival at the day-surgery clinic, to discharge. Wee follow the child's stay, in pictures and words, though anaesthesia and the operation. The film is seen from a child's perspective, in that it is a child who narrates and describes what the equipment is used for. This is not a scientific project, but information material intended to improve the quality of anaesthetic nursing care. Through the film the child becomes familiar with anaesthesia and the operation, and thereby feels more at ease.

Methods: All children between 4 and 12 years old receive a copy of the DVD at the pre-operative consultation and return it again on the day of surgery.

Results: Parents have expressed great appreciation for the film, as it has made it easier for them to prepare their child for the operation. The film has improved the quality of anaesthetic nursing care in that the children seem more familiar and at ease with the sights and sounds and of the operating theatre. Since introducing the film, we have experienced less distress in the children. Not only have they become inquisitive about the equipment, but the relaxed attitude of the parents also has a positive effect on them. Anaesthesia for children in the day-surgery clinic runs more smoothly and quickly because the children are more at ease with the situation.

Conclusion: This film is an effective tool in preparing children and their parents for surgery at the day clinic. This results in an improvement in efficiency and nursing care and can be highly recommended.

58 The effect of topical anesthesia with pharyngeal lidocaine spray for gastroscopy

A. Døfler, N. Thorsgaard, L.L. Mølby. *Day Surgery Unit, Herning Hospital, Denmark*

Introduction: Topical anesthesia with pharyngeal lidocaine spray has been used for upper endoscopy without convincing evidence of effect. In the endoscopy unit at Herning Central Hospital, sedation is no longer used routinely and the use of pharyngeal lidocaine spray is unsystematically decreasing.

Aim: To monitor the effect of pharyngeal lidocaine spray for gastroscopy on feasibility, discomfort, agitation and patients' estimate of discomfort of postexamination fasting.

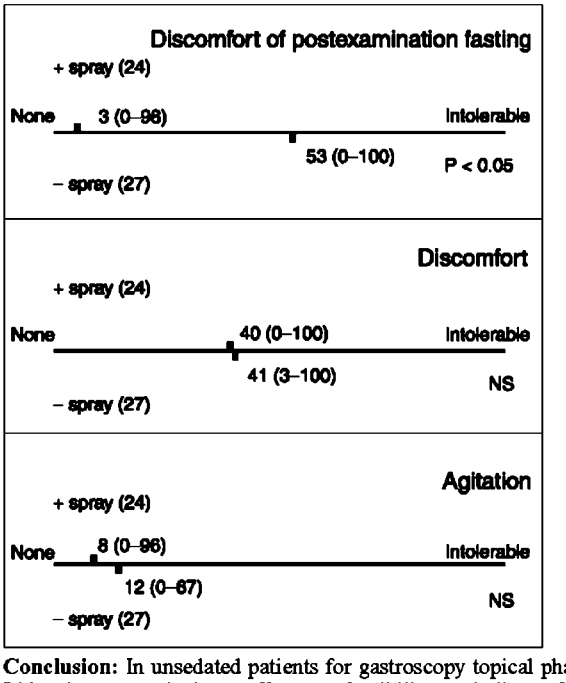
Design: Herning Central Hospital has a primary catchment area of 135,000 inhabitants. The annual gastroscopy activity is approximately 1400 gastroscopies, half of them open access gastroscopies, performed by a team of 4 gastroenterologists and 5 nurses.

In a 4 week period all adults referred for diagnostic open access gastroscopies were included. Sedation was not routinely used. In weeks 1 and 3 the patients were offered pharyngeal lidocaine spray as the "standard procedure", in weeks 2 and 4 gastroscopy without lidocaine was offered as "standard procedure". The endoscopy team was blinded about the "standard procedure" used (single blind design).

Results:

Feasibility:	n		n
+ Lidocaine	34	– Lidocaine	35
8 did not want spray	26	6 wanted spray	29
2 unsuccessful 24	24	2 unsuccessful	27
0 Midazolam sedation necessary*	24	4 Midazolam sedation necessary*	23

*P = 0.1



Conclusion: In unsedated patients for gastroscopy topical pharyngeal Lidocaine spray had no effect on feasibility and discomfort. The patients having been given Lidocaine did not find postexamination fasting unnecessarily unpleasant. The patients should be advised openly about pro et contras.

59 Ambulatory care of middle ear surgery

M. Nordensvard, A. Lindersson. *Akademiska Sjukhuset Uppsala, Uppsala, Sweden*

Background: Middle ear surgery performs in Uppsala on local anaesthesia. There is paucity of reports evaluating ambulatory care of these patients in the literature.

Aim and Methods: The purpose was to study patients' experiences after an ambulatory middle ear surgery prospectively. We collected all information from patient's charts and questionnaires to find their experiences directly after the surgery up to one week after. The questions were focused on pain, dizziness and nausea. The questionnaires were sent to 58 patients, male and female, age of 18 to 76. The answers were than related to the facts from charts and with the postoperative telephone call the day after.

Results: The result did not show any correlation between pattern in answers and age, sex, type of local anaesthesia or pre-medication. Only 8/49 felt dizzy the operating day but 7 days later still 8/46 complain of dizziness although 62.5% of these patients had no dizziness the day of surgery. 24/49 had pain the day of surgery and 4/44 still complained after 7 days. 9/49 had nausea the day of surgery and 5/43 had problems with nausea after 4 days.

Conclusions: Information is very important and needs include warnings about late dizziness and nausea, which are a bigger problem than we thought before. Pain-relieving medication needs to be

prescribed more frequently. In spite of the significant problems with dizziness, nausea or pain the majority of our patients preferred to go home the same day and felt safe in ambulatory care.

60 The nursing process of day surgery at Maria hospital in Helsinki (patient with varicose veins)

A.-L. Korhonen, L. Mäntylä. *Hospital Marian Sairaala, Helsinki, Finland*

Introduction: This poster was made to introduce the nursing process of our day surgery by using a varicose vein patient as an example.
The organisation of secondary health care services has recently undergone major changes in Helsinki, requiring also reorganisation of day surgery practices.
The vascular out patient-department (OPD) where all the varicose vein patients go first, is located in other hospital than the day surgery unit (DSU). The problem was: how to inform the doctors and nurses about our practice so that they can give correct information to the patients.
Contents: To make this poster we had to put the nursing process in pieces to get it on the paper.
The process starts when the patient meets the surgeon at OPD. There the surgeon makes the decision for the operation. If the patient is suitable for day surgery, the patient will be put on the waiting list.
The nurse from Maria day surgery unit will call all the patients before the estimated operation time (approximately 1 month before). The preadmission assessment can be done by the phone, or if needed, the patient comes to Maria hospital to meet the DSU nurse.
During the last ten years the whole day surgery team (nurses and doctors) have developed our practice, so that we usually use spinal anaesthesia to operate the patient. It gives us opportunity to operate patients belonging to ASA 3 group. Special to varicose vein patients is that they use compression stockings (knee length) after the operation. Nurses put the stocking on in the operation theatre immediately after the operation.
The day after the operation all the patients will receive a phone call from a DCU nurse. We make sure that patients are well, pain medication is correct and that the patients have an opportunity to ask about anything if necessary.
Aim: To improve the awareness of day surgery and to improve the communication between the other departments and DSU's our unit is planning to establish an own website. This will facilitate the education of students and new staff, and also help patients find information on day surgery.

5. Quality

Oral presentations

84 Suitability for outpatient femoral angiographies

Chirag Parikh, Vijay Bahal, A.S. Brar, Al-Hamali. *Kettering General Hospital NHS Trust, UK*

Purpose: To evaluate the in-patient procedures to check its feasibility for outpatient procedures at Kettering General hospital NHS Trust.
Methods: Retrospective analysis of 50 case notes of patients in whom femoral angiography, angioplasty or stenting procedure performed over a period of 3 months.
Results: The results are far better for all criteria set before the study except the criteria for procedures done before noon.
Conclusion: With newer technical equipment arteriography can be performed safely on an outpatient basis with cost savings for the community and high degree of patient satisfaction. However local G.P. or Vascular Nurse should follow all patients within 1 week to rule out fatal complications like retroperitoneal haematoma.

85 Day surgery abscess pathway: evaluation of efficiency and utilization in a university hospital day surgical unit

R. Correa, V. Pyda, N.M. Williams, S. West, J. Ginn. *University Hospital Coventry and Warwickshire, UK*

Introduction: The treatment of patients with abscesses on a day care basis has been shown to be cost effective [1]. Patients presenting to our hospital with an abscess requiring incision and drainage had a mean average stay of 3.3 days following inpatient admission. We initiated a day surgery abscess pathway to reduce length of patient stay in hospital and improve patient satisfaction. Our study evaluates the efficiency and utilization of this pathway.
Methods: Patients with abscesses presenting to our hospital emergency assessment unit (EAU) between 08:00 and 16:30 hours are assessed by a surgical registrar. If incision and drainage of the abscess is needed, preliminary screening is carried out by a nurse in EAU using a questionnaire. Patients deemed suitable are prescribed antibiotics and analgesics before being referred to the surgical day unit (SDU) for a full preoperative assessment. If SDU criteria (age >1 year, ASA 1/2, Body Mass Index $\leqslant$35) are met, patients are allocated a slot at the end of a consultant general surgeon's list the following day. Our study group comprised 20 patients treated via the day surgery abscess pathway over a 4 month period. The control group consisted of 65 patients with abscesses treated conventionally as inpatients during the same period.
Results:

	Study Group (Abscess pathway)	Control Group (Inpatients)
Number of patients	20	65
Age (average/range)	38 (7–75)	35 (16–71)
Sex (male/female)	7/13	31/34
Average length of stay in EAU (hours)	2	5
Average length of stay in hospital (hours)	7.5	27.5

Three patients in the study group had pilonidal sinus excision as an additional procedure Postoperatively, 1 study group patient was admitted overnight from the SDU for excessive drowsiness.
Discussion: Patients in the study group show a marked reduction in their duration of stay both in the EAU and hospital, confirming the efficiency of our abscess pathway. Patient satisfaction is increased due to shorter treatment times. In addition surgery is carried out by a consultant surgeon who is capable of performing aditional procedures as required. Allocating patients a slot at the end of an elective SDU list provides flexibilty without compromising usage of the list. Limitations of our abscess pathway include a lack of SDU general surgery lists on Thursdays and the inability of nursing staff to assess patients outside working hours of the SDU. Also,we currently do not undertake day surgery on insulin dependent diabetic patients.
Conclusion: The day surgery abscess pathway in our hospital provides an efficient way of managing patients with abscesses needing incision and drainage. Utilization of the pathway could be improved by expanding patient selection criteria.

References

[1] Conaghan PJ, Figueri E, Griffin MAS, Ingham Clark CL. Randomized clinical trial of the effectiveness of emergency day surgery against standard inpatient treatment. British Journal of Surgery 2002; 89: 423–7.

86 AQS1: quality surveillance for ambulatory surgery. Concept and results

A. Neumann, K. Backer, P. Krueger. *Clinic Munich-West, Germany*

AQS1 is designed as a questionnaire system to study and to measure the quality of medical care during an following ambulatory surgery and to study the satisfaction of the patient. First part of the protocol is to be answered by the surgeon and the anaesthesiologist. In the second part the patient is requested to give his feed back. AQS1 records the complete process of the ambulatory surgery. That means that the patient-questionnaire contains information from the first up-front contact to the receptionist until the period of recovering at home – including e.g. postoperative pain or complications. The surgeon and the anaesthesiologist record their work during the surgery till the patient leaves the recovery room. All this information is collected in one database. Every three months the data are analyzed and presented in a standard sized report. The single results of every outpatient clinic are compared with the complete group of study members (all outpatient clinics). The aspect of benchmark is important to identify and to solve problems in the clinical pathway and on the other hand to recognize facilities above average. Further on diagnose (ICD 10) or procedure (OPS 3.01) related groups are analyzed e.g. in aspect of infection rate, incidence of thrombosis, percentage of secondary hospitalisation and more.
Since 1999 the AQS1 system is used in Germany as a daily medical routine in many outpatient clinics and also to evaluate patients outcome in special projects of medical associations (BAO) and insurances. The database contains 2004 data of more than 40,000 ambulatory surgeries – we are able to present outcome data of different specialties like Orthopaedic Surgery, General Surgery, Gynaecology, Urology, etc.

87 A development and quality improvement of postoperative pain in the treatment of shoulder operated patients at the Department of Day Surgery

H. Flodager, B. Nielsen. *Department of Day Surgery, Horsens Hospital, Denmark*

A project based on the development – and quality improvement, of postoperative pain in the treatment of shoulder operated patients at the department of Day Surgery, Horsens hospital, Denmark. The patients

did evaluate the care and course of their treatment by Internet based questionnaire.
The project group: Head Nurse Jane Elgø, leading anaesthesiologist Jan Bjørn Nielsen, the Department of anaesthesia. Specialist of diseases of the shoulder, Gerhardt Teichert, Department of orthopaedic surgery. Department nurse Birgitte Nielsen and nurse Helle Flodager Stevens, Department of Day Surgery. Nurse Kirsten Hede, department of anaesthesia.
Introduction: Shoulder surgery is well suited for Day Surgery. Previous reports and projects from the department of Day Surgery indicate that the treatment for pain has not been sufficient. The project of development and quality improvement is based on improvement regarding the treatment of postoperative pain on patients, who have had shoulder arthroscopy (decompression or lateral clavicle resection.) Local anaesthesia used with "Pain Buster" pain catheter is a supplement of a traditional pain treatment. Other papers confirm the applicability of "Pain Buster" catheter. The procedure is that the patients themselves disconnect the "Pain Buster" pain catheter after 48 hours.
The intention of the study is to show whether the actual treatment of pain, in combination with the "Pain Buster" pain catheter, will better the option for treatment to patients having operations of the shoulder at the Department of Day Surgery.
The pain catheter is placed percutaneously into the subacromial space, and the "Pain Buster" reservoir is filled with 100 ml 0.25% bupivacaine. The patients also have a supra scapular block combined with a subacromial injection with a total amount of 20 ml 5% bupivacaine/adrenaline.
In previous reports and projects, the Department of Day Surgery has tested the effect of this present pain treatment of patients with shoulder operations with the VAS scoring system, which forms the base for this project.
In our previous report we concluded that 36% of the patients had a VAS score more than 4, on the day of operation, and on the following day after the operation 50% of the patients had a VAS score that was more than 4. The applied drugs were: paracetamol p.o, tenoxicam p.o, Caps oxycodonhydrochloride p.o, tablets oxycodonhydrochloride p.o, ketorolac i.v.
These drugs form the base of the present pain treatment with "Pain Buster" pain catheter as a supplement.
Goals:
1. To develop a pain treatment, which is effective and free of complications and applicable in the postoperative treatment of patients operated in the department for day surgery.
2. That the patients are as free of pain as possible scoring less than 4 on the VAS scale.
3. That the patients feel confident, about going home with the catheter, which must be removed by the patients themselves.
4. The internet is used to complete the questionnaire. Data are collected into a base where patients score themselves with the VAS scoring system.

Nursing intervention: That the patients by means of purposeful information follows the planned postoperative pain treatment after the discharge from the Department of Day Surgery. So that the patients feel well informed.
That the patients by follow-up telephone interviews on the first and the third day are supported and guided through the postoperative pain treatment, and that all the unpleasant events with "Pain Buster" pain catheter will be registred.
That the patients feel confident, about going home with the catheter, which must be removed by the patients themselves.
Material and Method: The project of development and quality improvement is planned as a prospective test with a retrospective control group. 22 patients from the previous project of pain treatment are going to be compared to 40 patients from the "Pain Buster" project.
Inclusion criteria:
- Shoulder arthroscopy, either as decompression or a clavicle resection with the patient in the lateral position with his upper arm extended.
- Cryocuff or ice bag
- General anaesthesia
- ASA 1 and 2
- Age 30 to 65 years
- Sex: male or female

Exclusion criteria: Lack of patient's compliance in co-operating.
Result: The results will be ready during February 2005. It is our hope, that the patients will have a lower pain score after treatment with "Pain Buster" catheter.
Future Perspectives: Pain treatment with the use of "Pain Buster" pain catheter may be the start of extending the group of patients fit for day surgery treatment. Using the internet-based questionnaires it might be possible to alter procedures and adjust patient care according to current data. The results from the report will be available via the Internet. The quality assessment will be used for clinical guidelines to be applied at the department for day surgery.

88 Day case laparoscopic cholecystectomy

M.A. Rathore, M. Mansha, M.G. Brown. *Hospital Causeway, Coleraine, NI, UK*

The aim was to share the initial experience of DC-LC at the unit and is presented as an audit loop.
Patients and Methods: Over a 32-month period, 164 patients were observed. First 112 patients (Group A) retrospectively in an observational manner and the next 52 (Group B) as prospectively (interventional). Apart from the number, the demographic data of the two groups was comparable. For Groups A/B, the median age was 41/45 y, M:F ratio 1:5/1:6. ASA I–II/I–III. Pts >55 y were 36 (32%) in Group A and 20 (38%) in Group B.
Standard laparoscopic cholecystectomy was performed. All patients had anti-DVT prophylaxis (pneumatic compression and enoxaparin), per-operative antibiotic, oro-gastric tube, paracetamole suppository and local anaesthetic to all wounds. They were discharged the same day. The end point was 6 weeks follow-up (86% overall).
Results: The direct admission rate (DAR) was 20% for Group A and 6% for Group B. Increased confidence among nurses and judgement-based discharges of patients were contributory. This did not result in higher re-admission rate. The 'unavoidable causes' included suction drain (2/23), operation in the afternoon (2/23), and recent biliary pancreatitis (1/23). In Group B there were 2 conversions. In the first phase (Group A) patients >55 years had one in three chances of requiring unplanned admission. This association was not seen in Group B. The proportion of re-admitted patients was comparable (3.5% vs 4%). Satisfaction level was 100%.
Conclusion: DC-LC is safe and feasible. No definite predictors of direct admissions were found. The importance of audit as a clinical tool was highlighted.

89 Results from a 4-year day surgery unit practice

N. Guimarães, T. Barreto, L. Vazquez, M. Serdoura, D. Marques, P. Lemos. *Hospital Geral de Santo António, SA, Porto, Portugal*

Background and Goal of Study: All clinical practice should be attentively evaluated in order to achieve the best possible performances. We analysed the last 4-year practice at our day surgery unit (DSU) based on clinical indicators. The goal of this study is to identify situations susceptible of improvement in our ambulatory surgery programme.
Materials and Methods: We did a transversal analysis using our database that included 5134 patients operated at our DSU between 1st January 2001 and 31st December 2004. Several variables were analysed: age, physical status (ASA) higher than II, more complex surgery, failure to admit, cancelled or postponed surgery, return to the operating room, unplanned overnight admission, pretending to study their evolution during the last 4 years.
Results: See the table.
Discussion: With an aged population, characterized by growing associated medical problems, and performing more complex surgery, we are improving our day surgery programme with better performances: safer, more effective and more efficient in our results. Nevertheless,

there is still space for improvement, specially lowering cases not performed.

	2001	2002	2003	2004
Patients operated (n)	1109	1085	1512	1428
Mean age (years old)	37.72	40.45	41.74	42.89
ASA > II (%)	6.94	6.91	9.26	9.94
Complex Surgery (%)	4.05	5.10	6.66	7.15
Failure to admit (%)	5.95	4.19	4.77	3.98
Cancel/Postponed Surg (%)	4.63	4.94	5.02	14.70
a) Due to strike (%)	1.37	0.92	0.36	10.70
b) All other causes (%)	3.26	4.02	4.66	4.00
Return operating room (%)	0.36	0.28	0.13	0.14
Unplanned admission (%)	1.62	0.55	0.46	0.63

90 Driving restrictions following general anaesthetic day surgery

M. Morgan, C. Lewis. *Princess of Wales Hospital, Bridgend, UK*

This study investigates patients' knowledge of post-operative driving restrictions following general anaesthetic day surgery. In addition, the paper will analyse patient compliance with recommendations following discharge.
Overall, three simple recommendations helped to significantly improve measured outcomes. Firstly, the recommendations significantly improved patient knowledge of post-operative driving restrictions. Additionally, they impressed upon patients the importance of such restrictions and therefore improved patient compliance. The results will help form new recommendations for the delivery of information to ambulatory care patients in the United Kingdom. These recommendations are simple, effective, time-efficient and cost-neutral. They should form part of modern European ambulatory care service frameworks to safeguard both patients and healthcare professionals.

91 The paediatric tonsillectomy patient: educational needs and care of both patient and carer

M. Tricker. *Hospital Toowoomba Surgicentre, Queensland, Australia*

I will be presenting the Toowoomba Surgicentre's study fo the child up to the age of 14 years having tonsillectomy in Day Surgery. That is the patient spends about six hours in the facility. We started doing tonsillectomies in 1987 and have performed over 1200 procedures. The first eleven years was with the laser and since 1998 we have been using diathermy. There have been very few admissions to hospital.
We must provide care to the patient and parents from the time of the decision to have the procedure. How do the parents feel when they are told their child is to have surgery? How do they react? What are their fears and concerns? The surgeon at the time of booking and gaining the consent explains the procedure and complications. This may elivate some of the concerns. Elimination of an overnight stay is another way to help reduce the psychological sequelae associated with hospitalization and separation from the child.
The pre-admission nurse's responsibilities are to provide support, education and information in a confident, professional dialogue. If the parent is feeling confident in the skills of the staff they are more likely to hear what is being told to them. This is necessary to facilate patient education to achieve expected outcomes. The principals of self-efficacy are applied to encourage confidence in the parent ability to care for their child.
The patient education provides a comprehensive look at the processes, expectation, staffing and times in each area of the facility. The parents are told how long they will be away from the child and that they will accompany the child to theatre and support them till they are asleep. They are informed of when the child will be returned to them and resume the care. All this information is repeated on admission. They are given written and verbal instrucations on the care post discharge in third stage. The complications and what to do and the importance of keeping up the fluids and food intake are all explained. Last, the parents are given the location of their neasest hospital if they are worried about the child.
Presently, I am conducting phone interviews of all tonsillectomy patients on the eight day post-operatively to obtain the level of satisfaction the parents have of the education and information that was given to them. Our protocol is to ring the parents the night of surgery and the next day. I am finding that the parents appreciate this phone call on the later date as they have had time to access the education. The parents are able to give me a comprehensive view of the facility and the ability of the staff which may result in a change to are education information.

92 Evaluation of the efficiency of a day surgery knee trauma list

A.P. Chandratreya, R. Correa, M. Palmer, T.J.W. Spalding. *University Hospital Coventry, UK*

Aim: To evaluate the efficiency of a dedicated day surgery list for acute knee trauma requiring arthroscopy.
Introduction: Patients with acute knee trauma may require arthroscopy. Traditionally in our hospital this has been done as in-patient on a regular trauma list. We introduced a dedicated day surgery knee trauma list with the aim of reducing in-patient admissions, patient waiting time and costs. Our study evaluated the efficiency of this list.
Methods and Results: The study group was a retrospective review of patients undergoing arthroscopy on the day surgery knee trauma list in the first 8 months of its inception versus a control group of in-patients undergoing arthroscopy on a trauma list in a 8 month period prior to the introduction of the day surgery list. The control group patients (n = 49) were admitted as in-patients from the fracture clinic and awaited surgery on the trauma list. Three of these patients required a repeat arthroscopy while 13 patients were operated on 'out-of-hours' (i.e. after 17:30 hrs). The average stay in hospital was 2.5 days. The study group patients (n = 53) were first seen in a fracture clinic and then referred onward to the knee unit team. If arthroscopy was deemed necessary, patients were booked onto the day surgery knee trauma list after pre-assessment by the nursing staff. Surgical criteria were: locked knees secondary to meniscal tears, loose bodies/ cruciate ligament ruptures, acute osteochondral fractures and children with acute meniscal tears. Patient criteria were: ASA grade 1 or 2, age > 1 year and body mass index (BMI) < 35.
Elective patients could be called in at short notice to ensure optimal theatre utilisation. The numbers of significant procedures carried out were: meniscal repairs – 5, re-fixation of osteochondral fragments – 3, partial menisectomy – 20 and diagnosis of anterior cruciate ligament rupture – 5. None of these patients were admitted overnight. The average cost for a patient undergoing arthroscopy in our hospital as a day case is £807 (€1170) compared to £872 €1260) as an in-patient during normal hours (09:00–17:30 hrs) rising to £958 (€1390) for out-of-hours surgery. The cost of an overnight stay on the ward is £230 (€330). As a majority of the control group patients spent an average of 2.5 days in hospital, the implementation of the day surgery list saved an average of £645 (€935) per patient treated (£726, €1050 for out-of-hours).
Discussion: Patient satisfaction increased, due to minimal disruption from familiar surroundings and assured operating times. Quality of treatment provided improved as the availability of specialist surgeons for the day surgery knee trauma list reduced re-operation rates. Skills of theatre staff were enhanced by regular exposure to specialized equipment needed for complex arthroscopic procedures. Increased cost efficiency per patient episode.
Conclusion: A dedicated day surgery trauma list has proved to be a very efficient method of managing knee trauma patients requiring arthroscopy.

93 A retrospective examination of one US surgery center's success at improving patient throughput using a computer assisted, nurse led pre-operative screening system

T. Wherry[1,2], A. Valedon[3]. [1]*Medical Director, Surgery Center of Maryland, Silver Spring, Maryland, USA;* [2]*Consulting Medical Director, Health Inventures, LLC (USA) and Ascent Health, Ltd., UK;* [3]*Consulting Anesthesiologist, Health Inventures, LLC (USA) and Ascent Health, Ltd., UK*

Objective: The safety of ambulatory surgery relies heavily on the pre-screening process. In the USA, the traditional pre-operative clinic has been replaced by a nurse led phone call system. Because the quality of this call can vary, many facilities have adopted overly stringent guidelines.
The Surgery Center of Maryland opened in 1997. For the first three years of operation, the center used a nurse led phone call system with stringent guidelines. This resulted in an average of 300 patient (10%) denials per year.
Methods: In early 2001, the center changed three key aspects of the pre-op screening process. With guidance from the anesthesia group, the center adopted open guidelines. The decision of patient suitability now being the center's responsibility. Next, the center hired one full-time phone call nurse. Finally, the center went from using basic screening questions to adopting an anesthesia focused screening record. This same record was placed on the nurse's computer screen using the Acrobat Reader program. The program allows the nurse to move the cursor over certain medical conditions to reveal a list of more detailed information or questions.
Results: By 2004, the Surgery Center of Maryland has been able to increase volume to 5000 patients per year and have reduced denials to less than 1 percent.
Conclusion: Since adopting this new protocol, the quality of the screening process has improved. Because of the open guidelines, the nurse encountered patients with significant medical issues. However, the improved computerized form allowed the nurse to explore the issues in greater detail.

94 Postdischarge patient quality after ambulatory haemorrhoidectomy

K. Hjermann. *Ullevål University Hospital, Oslo, Norway*

Methods: The patients were operated with Milligans procedure. Anesthetic technique: remifentanil + propofol i.v. (sedation), supplemented with local anaesthesia. Paracetamol, rofecoxib and dexamethasone were given for pain prophylaxis. When discharged, the patients were given a standardised form to write down their experience of pain (VAS 0–10), and need of analgesics during the first 6 days. The patients were also interviewed by a standardized telephone questionnaire 6 days and 6 weeks after surgery.
Results: During 6 months, 50 consecutive patients were included in the study, 37 females and 13 males. The mean VAS score for pain increased from 2.4 (day 1), to 4.6 (day 6). Although available, the patients did not take full benefit of the oral analgesics supplied (paracetamol, rofecoxib and codeine). 17 patients (34%) had nausea or vomiting. 2 patients described postoperative bleeding as "a lot". 27 patients (54%) felt constipated, 39 patients (78%) used laxative as prescribed. The first 6 weeks, 17 patients contacted the unit, 27 their private doctor. 31 patients had a better or similar total experience compared to what they had expected, 19 (38%) had a worse experience, mostly related to postoperative pain. When leaving the hospital, only 3 patients were not satisfied with the information, but 6 weeks later 11 patients felt the information was insufficient.
Conclusions: The study did not reveal any serious or dangerous problems. However, the pain-scores after day 1 are too high, the patients must be encouraged to take more analgesics. It is also necessary to focus further on better patient information, in order to improve the quality and reduce the high number of post-discharge calls to health care providers.

95 Retrospective review of post-operative complications in patients with sleep apnea syndrome undergoing same-day procedures

A. Valedon[1,2], T. Wherry[1,2]. [1]*MD-ASCENT Health, UK;* [2]*First Colonies Anesthesia Associates, Maryland, USA*

Introduction: Complications associated with Sleep Apnea (SA) and related syndromes can present significant morbidity and mortality for patients undergoing outpatient (same-day) surgical procedures. Such complications include hypoventilation leading to significant hypoxemia or hypoxia, cardiac arrhythmias, pulmonary edema, and death.
Objective: To conduct a retrospective review of 2300 cases performed in free-standing outpatient centers for a period of twelve months, with emphasis on patients diagnosed with obstructive SA. Deviations from routine perioperative care were noted.
Methods: 2300 patient records were reviewed and the diagnosis of obstructive SA noted. Records were assessed for the following perioperative care deviations/complications: 1. Need for rescue from hypoventilation by pharmacologic interventions, 2. Airway manipulation leading to prolonged placement of artificial airways, 3. Need to transfer to a tertiary care institution, and 4. Death. Anesthetic techniques received by these patients ranged from minimal sedation to general anesthesia, with agents limited to diprivan (propofol), in combination with fentanyl and/or midazolam.
Results: Data reviewed showed that 89 patients were diagnosed with obstructive SA. 5 out of those 89 patients required placement of a nasopharyngeal airway in the post-operative period. Removal of the nasopharyngeal airway was completed within 10 minutes of arrival to the recovery area. None of the other complications listed were noted on the 89 patients.
Conclusions: Based on the retrospective review of the noted charts, the extent of complications in the immediate post-operative period in patients with obstructive SA was limited to short-lasting airway manipulations. Further studies are needed to improve identifying post-discharge complications, safer anesthetic techniques, and appropriateness of SAS patients for same-day surgery.

96 Can we find predictive factors for unplanned overnight admission?

F. Barros, R. Maio, M. Monteiro, D. Marques, P. Lemos. *Hospital Geral de Santo Antonio, Porto, Portugal*

Background and Goal of Study: The major goal for ambulatory surgery programmes is to send back home patients in a safe and well-being way after surgery. Unplanned overnight admissions (UOA) are always a drawback of our clinical practice and all efforts must be made in order to avoid these situations. The goal of this study was to identify risk factors involved on UOA of patients submitted to day surgery.
Materials and Methods: We analysed retrospectively our database that included 5134 patients operated at our Day Surgery Unit (DSU) between January 2001 and December 2004. The following variables: sex, surgical speciality, age, physical status (ASA), preoperative evaluation, anaesthetic technique, time of anaesthesia, postoperative nausea and vomiting (PONV), pain, and haemorrhage were identify in order to find if they were UOA risk factors. First we used Chi-Square Test for testing each factor individually. Differences were considered significant when $p \leqslant 0.05$. Secondly, we used logistic regression for identify the multivariate association strength of these factors.

Results:

Variable	Total				OR	P
	n	%	N	%		
Surgical specialty						
Others	4530	88.2	29	0.6	1.0	–
Gynaec	604	11.8	11	1.8	17.1	**<0.001**
PONV						
No	5021	97.8	33	0.7	1.0	–
Yes	113	2.2	7	6.2	6.9	**0.001**
Haemorrh						
No	5057	98.5	26	0.5	1.0	–
Yes	77	1.5	14	18.2	46.3	**<0.001**
Pain (VAS)						
⩽3	4700	91.6	29	0.6	1.0	–
>3 – ⩽6	423	8.2	10	2.4	2.8	**0.027**
>6	11	0.2	1	9.1	3.4	0.383
Age (years)						
⩽20	513	10.0	0	0.0	1.0	–
21–40	1937	37.7	10	0.5	2.5	**0.045**
41–60	1936	37.7	21	1.1	3.3	0.056
>60	748	14.6	9	1.2	8.9	0.089
Time of anaesth. (min.)						
<60	3699	72.0	11	0.3	1.0	–
60 – <120	1277	24.9	18	1.4	7.6	**<0.001**
120 – <180	136	2.7	6	4.4	29.5	**<0.001**
⩾180	22	0.4	5	22.7	238	**<0.001**

OR – multivariate odds ratio; VAS – visual analogue scale.

At the multivariate analysis (multiple logistic regression), sex, physical status (ASA), preoperative evaluation and anaesthetic technique were not associated with UOA.
Conclusions: The identification of UOA risk factors such those found in our sample will allow us to select more carefully patient and surgical procedures for an ambulatory programme in order to improve the quality of our clinical care and the satisfaction of our patients.

97 Evolution of quality indicators in a major ambulatory surgery unit: ten years experience

L. Hidalgo. *Hospital de Mataró, Spain*

Background: The quality assessment is essential for the development of Major Ambulatory Surgery Units (MASU). Quality indicators have to be under control to achieve a correct management of the MASU.
Material and Methods: Since 1994 to 2004, 24,827 surgical procedures have been performed in the MASU of the Hospital of Mataró, while 49952 surgical procedures have been done as in-patient. Quality indicators changed over time but several were considered since the activity of the MASU began. Those indicators were the following: substitution index, cancellations, early and late admissions, postoperative phone calls and patients with postoperative pain under 3 measured by analogical visual scale.
Results: The substitution index increased from 21.69% in 1994 to 63.98% in 2004. Cancellations varied widely, but in 2004, there was no case. Percentage of early admissions was always under 3% (1.35% in 2004). In the case of late admissions, the rate was always under 0.5% (0.27% in 2004).
Postoperative phone calls progressively decreased until 2.86 in 2004.
Conclusions: The results of the quality indicators of our MASU have been improving along the time. The knowledge and evaluation of those indicators allows a good quality management.

Posters

98 Patient safety

M. Grumsen. *Sydvestjysk Hospital, Esbjerg, Denmark*

01.01.04 a new law in Denmark was founded, as the first country in the world. That means that everybody working within the hospital is obliged to report an unintended event. We want to make a poster, giving you a view on how we got introduced, and are working with patient safety in the Danish hospital.
The poster will contain
- The law
- Definitions and ideas
- Illustrations
- The reporting system
- Examples and courses on unintended events.

99 Investigating patients

P. Thomson. *Newcastle Dental Hospital, UK*

Background: We have previously reported that patients often experience significant pain and discomfort following oral day surgery. We have also demonstrated the usefulness of nurse-led telephone questionnaires following day surgery to monitor patient progress. Little is known, however, about the details of patients' experiences during the days immediately following surgery and there is known to be a need to improve pain control for these patients.
Methodology: Adult patients (18–65 yrs) attending the Oral Day Unit for dento-alveolar surgery procedures were recruited to the study. All patients were of ASA I or II fitness and underwent standardised anaesthetic and surgical techniques. A VAS pain score was recorded pre-operatively (baseline) and immediately before discharge (post-operative). A structured telephone questionnaire was completed by the day case nurse looking after the patient at 1 day, 5 days and 8 days post-surgery.
Results: Detailed results will be presented summarising general wellbeing, post-operative pain experience, efficacy of analgesic medication, incidence of nausea, headache, sore throat, post-operative tiredness, effects on sleep, return to normal activity and work, and the presence of other post-surgical problems.
Conclusions: Patients' experiences following oral day surgery will thus be characterised and the usefulness of post-operative telephone consultations/questionnaires discussed. Suggestions for improved patient care will be outlined.

100 Nausea and vomiting after Oral Day Case Surgery: does fasting make a difference?

R. Voase. *Newcastle Dental Hospital, UK*

The Oral Surgery Day Unit at Newcastle Dental Hospital provides surgical and dental treatment under general anaesthesia for a wide range of patients including children, adults and patients with medical or physical disabilities.
Despite careful pre-operative advice, anecdotal evidence suggests that many patients fast in excess of recommended anaesthetic guidelines leading to delayed recovery.
In order to investigate this further, a prospective study of 87 consecutive day case patients attending morning theatre sessions between August to November 2002 was carried out. Details of times patients fasted, length of anaesthesia, recovery periods and post-operative nausea and vomiting were recorded.
Patients ranged from 4 to 72 years of age, and their fasting periods varied from the recommended 4 hrs to greater than 18 hrs! Anaesthetic time was also variable, from 10 mins to over 3 hrs, depending on the type of surgical or dental procedure.

Whilst there was no clear correlation bewteen pre-operative fasting and recovery time, it was very concerning to discover just how long some patients actually fasted prior to surgery.
As a consequence of this study, we have revised our ambulatory surgery fasting guidelines and clarified pre-operative patient information.

101 Development of a nurse-led pre-admission clinic

S. Briggs. *Newcastle Dental Hospital, UK*

Development of a nurse-led pre-admission clinic has greatly improved the admission process in our Unit for oral day case surgery, optimising theatre utilisation, reducing patient anxiety, improving quality of care and enhancing patient satisfaction. Discharge from the Unit, however, tends to be less formalised based primarily upon subjective nurse/clinician assessment.
The aim of this study was to review patients' experiences upon discharge from our Unit and to develop a formal, patient orientated discharge protocol.
100 consecutive, oral surgery day patients were invited to take part in a nurse-led telephone questionnaire carried out 24 hours following their discharge. 12 questions were asked: 5 examining patients' general experience following surgery and 7 specific to details of their discharge from the Day Unit.
Results will be presented to summarise patients' current experience, and suggestions for a structured, formalised discharge protocol will be made which combine both patient and nurse/clinician viewpoints.

102 Satisfaction and quality of day surgery treatment for breast cancer

E. Schlichting. *Ulleval University Hospital, Oslo, Norway*

Nearly 600 new cases of breast cancer are treated at Ulleval University Hospital each year. From 2000, 90% of all cases are operated at our day surgery unit. Health personel were initially sceptical because of the risk for reduced physical and psychological follow-up of this patient group. We wanted to investigate the patients' experience with day surgery and also to focus on topics where we could possibly do better. Patients were given a questionnaire after the operation and delivered it three weeks later on the first postoperative control. Also, patients, relatives and health personnel were interviewed. 60% out of 123 delivered forms were returned.
The average age was 57 years (21–82), 72% had breast conserving surgery and 77% were operated with the sentinel node technique in the axils. In general, the results from the questionnaires and interviews were very positive. They were most discontented with the period of waiting for the histological report (could be 3 weeks). Everyone was pleased to go home from the hospital the day of operation or eventually to the patient hotel. Very few patients had problems with pain or nausea the first days after the operation. Some complications as seroma, infection or bleeding occurred, but all of these women were satisfied with the help they got with their problems. They felt less sick when they could go home the day of operation. The anaesthetist calls all the patients the first postoperative day and the patients value this highly. Everyone will encourage breast cancer patients to be treated at a day surgery clinic. Health personnel are also very satisfied with this logistic for operative treatment of breast cancer.

103 Evaluation of acute pain management following ambulatory surgery. Study of clinical practice in the north-east of France

E. Durand[1], C. Cornet[1], F. Empereur[2], T. O'Neill[1], P.M. Mertes[1], H. Bouaziz[1]. [1]*Service d'Anesthésie-Réanimation Hôpital Central,* [2]*Service d'Epidémiologie et Evaluation Cliniques, CHU de Nancy, France*

Introduction: Postoperative pain is often suboptimally managed following ambulatory surgery (Can J Anesth 2004; 51: 886–891). We objectively evaluated current clinical practice in 14 centres in order to detect any shortcomings pertaining to current guidelines (JCAHO; 2001).
Methods: Observational, surveillance study involving 14 centres, from October to November 2004: qualitative analysis of patient records and, telephone interviews of all consented patients 7 days following ambulatory surgery.
Results and Conclusion: 119 patients were included in this study. 50% had received information regarding postoperative pain preoperatively. Discharge summaries, inclusive of pain scores, were filed in 45% of records. A postoperative information leaflet, given to 87% of patients, included details of a contactable physician in only 23% of cases. Analgesics were prescribed for 60% of patients; NSAIDS being prescribed in only 14% of cases. Opioid rescue therapy was never prescribed. A discharge letter addressed to the General Practitioner (GP) was given to 45% of patients. 58% of patients experienced postoperative pain: 90% at home, especially during the first two postoperative days (37% on D0 and 40% on D1). 18% of patients resorted to auto medication and only 4% consulted their GP. 7 days postoperatively, 1 in 3 patients still considered their daily activity level reduced by more than 40%. This study has identified a deficiency in the provision of patient information/education, under prescribing of analgesics, and lack of communication with the GP.
Supported by a grant from the "Fondation CNP pour la Santé", under the aegis of the Fondation de France.

104 Sedation by non anesthesiologists: Combined education of gynaecologists and day care nurses

M. Van Putten-Beloeil, J.H. Eshuis. *Academic Medical Centre Amsterdam, The Netherlands*

Gynaecological and obstetric treatments under local anesthesia (deviations of the vulva, cervix, hysteroscopies, curettages, vacuum-curettages) are performed at the Day Care centre on the OR supported by and under surveillance of day care nurses. The gynaecologist orders the sedative or analgesic which the nurses administer on order. Apparently there were considerable variations in dosages prescribed and varied indications given by different gynaecologists. Not all nurses were familiar with the procedure to be followed. In addition there was no clear existing protocol for reference. This led to a temporary halt in treatment.
Objective: To restart the treatments with mutual agreement between the gynaecologists and nurses involved. This according to accepted regulations with regard to patient safety and procedural guidelines under the Dutch act, dealing with the healthcare professions (BIG-act).
Method: Participation in devising rules of practice was expected by a select number of specialists and nurses involved. The purpose was to initiate and develop a practical working relationship satisfactory to both parties. Combining education of gynaecologists and nurses resulted in a mutually accepted protocol. During the course a lawyer explained the BIG-act framework. The sedation technique was written by an anaesthesiologist in confirmation the Dutch Quality Institute of Healthcare (CBO)-consensus-report on Sedation by Non-anesthesiologists and the Guidelines stipulated by the American Society of Anesthesiologists. Special attention was paid to education, monitoring, preparation and administration of pharmaceuticals and the qualifications of the participants (see the table).

Pharmaceuticals: preparation, stand-by

Name	Effect	Ampule	Dilution	Syringe	Prepared/ Stand by
Atropine	Para-sympathicolytic, in bradycardia	1 ml = 0.5 mg	Undiluted	2 cc syringe, 1 ml = 0.5 mg	Prepared
Dormicum = Midazolam	Benzodiazepine, sedative	1 ml = 5 mg	Diluted, add 4 ml NaCl	5 cc syringe, 1 ml = 1 mg	Prepared
Rapifen = Alfentanil	Opioid Analgesic	2 ml = 1 mg	Undiluted	1 cc syringe, 1 ml = 0.5 mg	Stand by
Efedrine	α- and β-sympathico-mimetic against hypotension	1 ml = 50 mg	Diluted, add 9 ml NaCl	10 cc syringe, 1 ml = 5 mg	Stand by
Anexate = Flumazenil	Antagonist to benzodiazepine (Midazolam)	5 ml = 0.5 mg	Undiluted	5 cc syringe, 1 ml = 0.1 mg	Stand by
Narcan = Naloxon	Antagonist to opioid (Alfentanil)	1 ml = 0.4 mg	Undiluted	1 cc syringe, 1 ml = 0.4 mg	Stand by
Syntocinon (=Oxytocine)	Uterotonic in bleeding	1 ml = 5 I.E.		Indicated by gynecologist	Stand by
Methergine (=Methyl-ergometrine)	Uterotonic	1 ml = 0.2 mg		Indicated by gynecologist	Stand by
Sulproston (=Nalador)	Prostaglandine	500 µg	Diluted	In 250 ml NaCl	Stand by
Tavegil = Clemastine	Antihistaminic in allergy	2 ml = 2 mg, 1 ml = 1 mg	Undiluted	2 cc syringe	Stand by
Di-Adreson F aquosum	Corticosteroid in allergy	25 mg pulverized inj. + 1 ml water	Dissolve	2 cc syringe, 1 ml = 25 mg	Stand by

In this way a new basis is founded for the implementation of the treatment. In addition it is surprising for both parties to be educated together in this way.
The education involved a BLS-training for both nurses and gynaecologists and a ALS-training for the gynaecologists only.
Results: A protocol was written according to the given guidelines. Dosages and administration of the diverse pharmaceuticals are accurately documented, as well as the responsibilities assigned to the nurse and gynaecologist.
The participating gynaecologists and nurses attended the BLS and the ALS-training and this group is now participating in the gynaecological treatment under local anesthesia with sedation. This is now proceeding satisfactorily.
Conclusion: By searching for a common solution with both gynaecologists and nurses when problems and miscommunication arise, it is possible to bridge the differences as long as one operates according to accepted and safe preconditions.

References

[1] CBO (Dutch Institute for Healthcare) 1998, Sedatie en/of analgesie door niet-anesthesiologen.
[2] ASA Practice Guidelines on Sedation and Analgesia by non-anesthesiologists, Anesthesiology 2002; 96: 1004–17.

105 Follow-up telephone calls the day after ambulatory surgery: results of a three-years study

J. Langloÿs, J.P. Sales, H. Logerot-Lebrun, O. Gagey, A. Decaux. *Hospital CHU de Bicêtre, France*

Introduction: Telephoning patients the day after outpatient surgery should allows to check that the patient's condition in the day following surgery is at least as satisfactory as if he or she had been hospitalised overnight.
Methods: Between 2001 and 2003, 6881 patients underwent ambulatory surgery. In principle, all patients are telephoned the following day and questioned using a standardised questionnaire. Data were stored and any problems are signalled as soon as possible to all concerned.
Results: Only 31.8% of the 6881 patients were reached: 17.6% asked not to be contacted, 27.6% were not contacted for various other reasons and 22.7% could not be reached. Among the patients contacted, 84.4% reported no problem 24 hours after surgery, 23.3% did not take the painkillers prescribed, 1.2% called their treating physician and 0.6% returned to the hospital. The main complaints were: too long wait before discharge (10.7%), lack of information (4.2%), inadequate prescription (1.6%).
Discussion: The low call rate may seem surprising, one should take into account the nature of the patients concerned – abortion patients for example – and those who did not answer the call. The increase in the activity of the unit, without a corresponding increase in staff, led to a doubling of the number of patients not contacted over the three years.
Conclusion: Follow-up calls made the day after surgery are essential to check the quality of cares. Calls are not always possible, sometimes due to a lack of staff but should make it possible to improve the quality of cares.

106 A framework for the routine evaluation of the effectiveness of varicose vein surgery – preliminary results

P. Päsänen, L. Mäntilä, R. Roine, M. Lepäntalo. *Helsinki and Uusimaa Hospityal Group, Helsinki, Finland*

Aim: The importance of using some measure of health-related quality of life (HRQoL) has been increasingly recognized among both clinicians as well as administrators when considering the effectiveness of a particular treatment modality. In an effort to systematically collect cost-effectiveness data in the Helsinki and Uusimaa Hospital group, we have routinely documented HRQoL of our varicose vein patients, both before and after surgery.
The aim of this study is to evaluate the effect of varicose vein surgery on HRQoL of patients.
Material and Methods: Patients fill in the generic, self-administered 15D HRQoL questionnaire before and six months after surgery. The 15D, a profile and single index measure, includes 15 dimensions: mobility, vision, hearing, breathing, sleeping, eating, speech, elimination, usual activities, mental function, discomfort and symptoms, depression, distress, vitality and sexual activity. For each dimension, the respondent must choose one of the five levels that best describes his or her present state of health. From the results a single index score (15D score) on a 0–1 scale, representing the overall HRQoL, can be calculated from the health state descriptive system by using a set of population-based preference or utility weights. An index value of 1 represents full health and 0 is equivalent to being dead. To assess the cost-effectiveness of varicose vein surgery the HRQoL data are combined with routinely collected data on diagnostic and financial (direct costs borne by the provider) indicators of care.
Results: Data is currently available from 31 patients (mean age 48 years, 74% female). Mean (±SD) HRQoL score (on a scale of 0–1) before the operation was 0.92±0.06. Six months after the operation the mean utility score had increased only slightly to 0.93±0.07. Of the 15 dimensions of health covered by the quality of life instrument, sleeping, discomfort and symptoms and distress showed an insignificant improvement as a consequence of the operation.
Mean cost of providing varicose vein surgery was 1469±623.
Discussion: Collection of simple cost-effectiveness data in the department of day case surgery is feasible, requires only a small amount extra work and is potentially very useful when allocation of limited health care resources is considered. Surgery of varicose veins has a slight positive impact on HRQoL.

107 Satisfactory rate after laparoscopic day-surgery hysterectomy

M. Jungersen[1], O. Istre[2], M. Lieng[2]. [1]*Out-Patient Surgery Unit, Ullevaal University Hospital, N-0407 Oslo, Norway;* [2]*Department of Gynecology and Obstetrics, Endoscopic Unit, Ullevaal University Hospital N-0407 Oslo, Norway*

Study objective: To elucidate the safety and patient's satisfaction with laparoscopic supracervical hysterectomy performed in an outpatient setting.
Design: Prospective case study of fifty-two women who underwent outpatient laparoscopic supracervical hysterectomy and a telephone interview after 3–24 months. Forty-two women included.

Material and Methods: By discharge, the patients received written and oral information with the gynecologist and a nurse. Attention was made to expected pain and recovery, as well as telephone numbers to hospital and gynecologist.
Results: 36 (86%) of the 42 patients experienced no nausea. Pain was not seen in 30 (71%) after 7 days, pain score on VAS 1.24. Of the 42 patients 31 (74%) were satisfied. Return to normal activity was indicated as 25.1 day (2–120). Sexual activity was better in 13 patients. 18 of the 42 patients contacted the health system due to pain and fatigue and need of more sick leave. 2 patients were dissatisfied with the help. 36 (86%) of 42 patients would recommend the outpatient hysterectomy procedure.
Conclusion: Laparoscopic supracervical hysterectomy as an outpatient procedure is a safe and highly acceptable treatment. The patients feel safe and taken care of.

108 The effect of gabapentin on pain and late postoperative recovery after discharge following laparoscopic sterilisation

I. Moisgaard[1], M. Duckert[1], E. Lemvig[1], D.G. Jørgensen[2], J. Bartholdy[1], J. Engbæk[1]. *[1]Herlev and [2]Glostrup University hospitals, Copenhagen, Denmark*

Gabapentin is an antiepilepticum recently introduced for the treatment of postoperative pain.
Purpose: To investigate possible late side effect after discharge of preoperative gabapentin as an adjuvant to conventional postoperative pain treatment after laparoscopic sterilisation.
Methods: This study was part of another double-blind randomised placebo controlled study of the effect of gabapentin on postoperative pain [group 1, 38 patients (Gaba), group 2, 38 patients (Control)]. Preoperatively Gaba and Control groups received 1200 mg gabapentin and placebo, respectively. All patients received lornoxicam 8 mg preoperatively and PCA morphine postoperatively. At home patients administered lornoxicam, paracetamol and morphine as needed. 23 patients (Gaba) and 33 patients (Control), respectively, filled out a questionnaire on the evening of the 1. and the 4. postoperative day. Questions concerned pain intensity, subjective symptoms as nausea, vomiting and dizziness and time to mobilization.

Results of the questionnaires:

	Gaba	Control
Pain (%)		
1. postoperative day		
None/light	95	94
Moderate/heavy	4	6
4. postoperative day		
None/light	100	97
Moderate/heavy	0	3
Nausea (%)		
1. postoperative day		
None/light	81	69
Moderate/heavy	19	31
4. postoperative day		
None/light	100	100
Dizziness (%)		
1. postoperative day		
None/light	68	62
Moderate/heavy	32	38
4. postoperative day		
None/light	100	100
First able to walk around (%)		
0–4 hours after discharge	17	18
4–8 hours after discharge	22	21
2. postoperative day	52	33
3. postoperative day	9	27

Conclusion: Preoperative gabapentin for treatment of postoperative pain is not associated with late side effects. On the 4. postoperative day patients have generally recovered from the operation.

109 Do steroids reduce postoperative pain and nausea after outpatient laparoscopic cholecystectomy?

G. Goksoeyr. *Ullevål University Hospital, Norway*

Introduction: Between 1994 and January 2005; 1294 outpatient laparoscopic cholecystectomy (OCL) have been performed in our out-patient surgery unit. Follow-up routines include a telephone interview on the first postoperative day. Follow-up studies show that steroids reduce postoperative problems as nausea and pain. In April 2003 we started to give the OLC-patients dexamethasone 4 mg perioperatively. We continued giving our standardized total intravenous general anasthesia with infusion of propfol and remifentalin. Additionally ketorolac, paracetamol and droperidol and ondansetron were administrated as prophylaxis against postoperative pain and nausea. In order to validate the effect of steroids, a retrospective study on the outcome after outpatient laparoscopic cholecystectomy was initiated, focusing on the frequency of nausea, vomiting and pain on the first postoperative day.
Patients and Methods: During a period of eleven months, from December 2001 till November 2002, 100 patients were operated with OLC. None of these patients got steroids (Group 1). From April 2003 till November 2003, 68 patients were operated with OCL. These patients got dexamethasone 4 mg (Group 2). The study compares Group 1 and Group 2. All patients were interviewed by telephone according to a standardized formula on the first postoperative day.
Results: None of the procedures were converted to open operation. Group 1: 93% of the patients were discharged according to plan the same day. In this group 17% had nausea and 7% did vomit. 13% had severe pain, 80% had moderate pain and 7% had no pain. 80% were fully mobilized on the first postoperative day.
Group 2: 96% were discharged according to plan the same day. 14% had nausea, but none did vomit. 5% had severe pain, 40% had moderate pain and 55% had no pain. 92% were fully mobilized on the first postoperative day.
Conclusions: Steroids reduce postoperative pain, nausea and vomiting convincingly after outpatient laparoscopic cholecystectomy. Most of the patients are fully mobilized on the first postoperative day.

2. Surgery

Oral presentations

26 Characteristics of ambulant Chevron osteotomy – concept of preoperative and postoperative treatment

W. Willauschus[1], M. Schneider[1], W. Schaaf[2], W. Graham-Schaaf[2]. *[1]Orthopädische Praxisklinik Hallstadt, Germany; [2]Ambulantes OP-Zentrum Bamberg, Germany*

126 patients underwent a chevron osteotomy in our clinic between 1997 and 2003, of these 58 could be clinically evaluated in the follow up study. The average age was 54.2 years. 105 were female, 21 male. The average angle of the hallux valgus deformity was 30.7° (15–45°) and the intermetatarsal angle was 8–16°. The average Kitaoka score after surgery was 84.67 with an average angle of correction of 10.6°. 102 patient questionnaires were able to be evaluated and showed that 82% of the patients felt relaxed before the operation whereas 18% felt uneasy.
Circulatory problems ie. dizziness, nausea, pain awareness and swelling after the operation were gauged on a scale 0 to 10. The average value for circulatory problems was 1.64 and for nausea 1.41. Pain awareness in the first 3 days after surgery rated at 4.32 and then after at 2.7. The scoring for swelling after the 5th day was 4.34. 97% of the patients felt that the medical follow up at home was satisfactory. Secondary wound healing occurred in 5.8% of the patients however no cases were caused by infection. A haematoma resulted in 15.7% but intervention was not necessary. There was one case of deep vein thrombosis of the lower leg without pulmonary embolism and in one case X-rays showed bone necrosis which healed with therapy. The surgical correction of a hallux valgus deformity can be performed successfully on a day surgery basis when the necessary social, medical and structural requirements are provided. The results of day surgery are comparable with those found in the literature. There is a high acceptance of day surgery however it requires that the patients are comprehensively informed of the necessary treatment after surgery. A prerequisite is specialist standard for the orthopaedic surgery and anaesthesia. In the case of hallux valgus correction, post surgical pain relief is of critical importance and must be further evaluated and modified accordingly.

27 Sacral nerve stimulation: a day case procedure for faecal incontinence and constipation

M. Jarrett. *UK*

Background and Objective: Sacral nerve stimulation for faecal incontinence and constipation resistant to conservative treatments has been shown to be successful in 60–80% of patients. The procedure has the advantage of a temporary stimulation period prior to permanent device insertion. With the advent of a percutaneous technique for both temporary and permanent implants, these procedures may now be carried out as day case procedures.
Methods: Over the last two years 22 consecutive patients undergoing SNS for faecal incontinence and 24 consecutive patients undergoing SNS for constipation were studied.
Results: Of the 46 temporary wire implantations 21 patients (46%) had them placed as a day case procedure. 29 patients went on to permanent implantation of the new percutaneous tined lead. 10 (34%) of these were done on a day case basis. In both categories it was travelling distance and lack of social support that prevented more cases from having been done in this way. Levels of satisfaction and low complication rates have been maintained in the patients treated on a day case basis.
Conclusion: Sacral nerve stimulation is a technique that has been developed for both faecal incontinence and constipation. Improved insertion techniques have allowed it to be performed as a day case procedure. Now that the technique is becoming more widely available, travelling time will be less of a constraint to procedures being undertaken as a day case.

28 Laparoscopic supracervical hysterectomy performed in a day clinic – prospective multicenter (VAAO) study

A. Salfelder, R.P. Lueken, C. Bormann. *For Velener Arbeitskreis Ambulantes Operieren. Tagesklinik Altonaer Strasse, Altonaer Strasse 59–61, 20357 Hamburg, Germany*

Laparoscopic supracervical hysterectomy (LASH) is an alternative to total hysterectomy for benign conditions in cases where conservative treatment options fail. There are only few data concerning surgical techniques, postoperative well-being and complications from German speaking countries.
Data of 191 patients scheduled for laparoscopic supracervical hysterectomy were prospectively registered between 1.4.2003 and 31.3.2004. A questionnaire was filled in by the physician recording data pre-, intra- and postoperatively. All patients were interviewed six months after surgery and asked about their well-being, possible complaints and their fitness to work by telephone.
The average age of the patients was 43 years. The main indications for the operation were abnormal uterine bleeding and dysmenorrhea (65%). The mean operation time was 119 minutes and the average weight of the uterus corpus was 239 g. The uterine arteries were coagulated with bipolar current in most cases (81%) and the dissection of the corpus uteri from the cervix was done using monopolar scissors in 59% of the patients. In most cases the cervical stump was peritonealised (84%).
71% of the patients were operated in an outdoor manner. No serious complications were reported.
13% of the patients continued to have cyclical bleeding six months after the operation.
Laparoscopic supracervical hysterectomy (LASH) is a patient focused, outpatient and cost saving alternative to total hyterectomy for benign uterine conditions unresponsive to conservative treatment alternatives.

29 Day surgery rhinology – extending the boundaries

P.M. Brown. *ORL Consultant Modernisation Advisor to Thames Valley Strategic Health Authority, and Chairman, ORL Comparative Audit Group, Royal College of Surgeons (Eng), UK*

Otorhinolaryngology (ORL) has not traditionally had a good record in the UK for Day Surgery rate. The issues in ORL are often very different from other specialties. The main reason for a low day case rate is the fear of post-operative bleeding into the airways. This has been particularly the case with sino-nasal surgery, which only comprises 25% of all ORL day cases.
National data, as well as regional and local clinical audits, are analysed to determine what the main issues are, and how they might be overcome. Admission rates by procedure and reasons for admission are analysed. Multiple procedures carried out on the same patient, are common in ORL (34%) and are more common in rhinology (51%), and the effect this has on admission rate is discussed.
A steady improvement over the last 10 years throughout the UK is reported, yet the UK Audit Commission targets for day surgery are still not being met. Are they realistic? There is still a considerable variation in day case rates for the same operations in different surgeon's hands

in the same hospital, never mind between different hospitals where facilities may not be the same. Evidence based modification of surgical technique, pre-operative and post-operative management has allowed the author to achieve much greater day surgery rates in rhinology than many of his colleagues. These will be presented.

30 KTP laser reduction of inferior turbinates for nasal obstruction – A day case topical local anaesthetic outpatient procedure

A.A. Orabi, P. Morar. *Blackburn Royal Infirmary Hospital, UK*

Reduction of inferior turbinates of the nose is a common procedure. Many methods exist to reduce the size of turbinates. Most involve the need for a general anaesthetic, nasal packing to stop bleeding and the need for an overnight stay in hospital. We describe 40 patients treated with KTP laser in the outpatient setting. All patients were sprayed with 2.5 mls of topical lidocaine (5% w/v) and phenylephrine spray (0.5% w/v); Cardiovascular monitoring was instituted. Each inferior turbinate was lasered with six linear cuts to the anterior end for a length of 5 centimetres. Average time to complete treatment to a patient was 15 minutes. Only one case had to be abandoned due to lack of access from septal deviation. All other patients (39/40) were highly satisfied with the treatment. No patient required nasal packing or admission for bleeding.At three month follow up all patients were satisfied with the result of the surgery and would recommend it to a friend. KTP laser surgery is a very cost effective method of treating nasal obstruction due to turbinate hypertrophy, with good patient tolerance and reduced morbidity.

31 Outpatient laparoscopic surgery

E. Trondsen[1], J. Skattum[1], B. Edwin[2], T. Buanes[1]. *[1]Ullevål University Hospital and [2]Interventional Center of The National Hospital, Oslo, Norway*

Background: The purpose of this study was to assess the feasibility of advanced laparoscopic procedures performed as same day surgery, expressed by patient safety and satisfaction, and to assess consequences for education of residents and for health care costs.
Methods: The procedures were recorded prospectively focusing complications, admissions and readmissions. Patient satisfaction was evaluated by interviews. Health care cost were compared to standard inpatient hospital stay.
Results: During 1994 until 2004 1456 patients were operated.

Laparoscopic procedure	Patient number	Primary admission	Readmission	Grade III* complications	Patient satisfaction
Cholecystectomy	1271	9.8%	6.5%	0.6%	98%
Antireflux surgery	143	11.9%	11.1%	2.8%	88%
Adrenalectomy	28	4.2%	0%	0%	100%
Splenectomy	14	16.7%	20%	11.1%	86%

*Potentially life threatening complication.

Trainees attended cholecystectomy operations, performing two thirds of them assisted by a senior surgeon. Heath care cost saved compared to a median hospital stay of two days amounted one million Euro.
Conclusions: The main concern for patients undergoing these operations as outpatients is delayed recognition of serious complications. Careful evaluation before discharge, as well as thorough information on routines for readmission are mandatory. Adrenalectomy seems to be the easiest procedure to accomplish as same day surgery, splenectomy the most difficult. Generally, outpatient laparoscopic surgery is safe and patient satisfaction is high. Outpatient laparoscopic surgery is well compatible with training of residents, and health care cost savings are substantial.

32 Bipolar scissors vs conventional tonsillectomy

L. Fredelius, B. Strander, P.-O. Haraldsson. *Karolinska University Hospital and Danderyd, Sweden*

Aims: Tonsillectomy (TE) is traditionally performed with scissors, tonsil elevator and diathermy. The recent developed bipolar scissors may combine these tools. The present prospective study compares the two tech niques. Time consumption, blood loss, pain and complications were evaluated on the same subjects.
Methods: Consecutive patients of both sexes aimed for TE were subjected to TE after informed consent, in a prospective randomised, single-blind study using one procedure on each side. Group I: scissors, Henke tonsil elevator, bipolar diathermy. Group II: bipolar scissors (Eticon, set on 20 W), bipolar diathermy if necessary. Each side was completed at a time. Blood loss and total surgical time were registered. Pain was evaluated daily on a visual-analogue scale, VAS (0–100 mm).
Results: Forty-nine patients (M/F 20/29), mean age 14.3 (4–41) years were included. Thirty-one patients were operated due to upper airway obstruction. Mean time consumption for Group I was 11.6 (1.0–55) min and for Group II 3.1 (0.5–7.0) min (3.7× difference; t-test $p \leqslant 0.001$). The corresponding blood loss was 43.2 (7–225) vs. 3.0 (0–25) ml (14.4× difference; t-test $p \leqslant 0.001$). There was no difference in pain; duration 6–14 days. Two and three late haemorrhages were found in each group respectively.
Conclusions: Tonsillectomy with bipolar scissors was almost 4-fold faster and the blood loss was 14 times less than on the side operated with the conventional technique, whereas no difference in pain or complication rate was found.

33 Rectal stapled mucosectomy: A safe outpatient procedure for the treatment of haemorrhoids

L. Hidalgo, M. del Bas, A. Heredia, M. Prats, A. Martín, X. Suñol. *Hospital de Mataró, Spain*

Background: Rectal stapled mucosectomy (RSM) may be a useful surgical procedure in major ambulatory surgery. Postoperative pain levels after RSM are lower than those registered after resective classical techniques for the treatment of haemorrhoids and mucosal rectal prolapse.
Objective: To compare quality assessment parameters that have been previously defined in our major ambulatory surgery unit (MASU) with those obtained after RSM.
Patients and Methods: Since February 1999 to December 2003, 133 patients were operated using the RSM technique in our Hospital. Among them, in 96 (72.2%) the operation was done in the MASU: 58 men (mean age 47 years, range 21–77) and 38 women (mean age 47 years, range 30–69). Surgical indication was rectal mucosal prolapse in 13 cases, second degree haemorrhoids in 17 cases, third degree haemorrhoids in 31 cases and fourth degree haemorrhoids in 35 cases. Phosphate enemas were given preoperatively and all the patients were under antibiotic prophylaxis (a single dose of gentamicin plus metronidazol). All the patients were operated in Lloyd-Davies position and predominantly under spinal anaesthesia (91 patients, 94.8%). Mean operative time was 29.4 minutes (range 15–50). Postoperative analgesia included non-steroidal antiinflamatory drugs, an oral intake of water over 1 l/24 h, and the use of laxatives if constipation was present. The next parameters were evaluated: substitution index, me an postoperative stay in the anaesthetic recovering, mean postoperative stay in the MASU, postoperative pain, early and late admissions. A comparison with global parameters of the MASU was made.
Results: Substitution index of RSM was progressively increasing from 20% in 1999 to 88% in 2003 (global index for the MASU 58.31%). Time elapsed to discharge the patient from the anaesthetic recovering never was more than 90 minutes (global 3.6% of the patients). Mean postoperative stay in the MASU was 189 minutes (global 132.2 minutes). Twenty-four hours after the operation, pain was measured by a visual analogical scale: 88 cases (87%) expressed pain under 2 (scale 0–10). Early postoperative admission was necessary in

4 patients (4.2%, global 2.3%): 2 cases of postoperative hypotension, one case of perirectal haematoma and other case for social conditions. A single case of late admission was registered (1.6%), due to a postoperative rectal bleeding.
Conclusions: RSM has been successfully implemented in our program of major ambulatory surgery. Quality parameters of RSM are similar to those obtained in the global evaluation of the MASU. RSM can be done by MASU with an strict program of quality assessment.

34 Outpatient laparoscopic supracervical hysterectomy

M. Jungersen, M. Lieng, A. Langebrekke, B. Busund, O. Istre.
Ullevaal University Hospital, Norway

Study objective: To elucidate the safety and patient's satisfaction with laparoscopic supracervical hysterectomy performed in an outpatient setting. Design: Prospective case study.
Patients: Firthy-three women.
Procedure: Outpatient laparoscopic supracervical hysterectomy performed by laploop.
Results: The procedure could be recommended by 41 out of 43 patients. Three patients (7%) were admitted to the ward due to complications following the surgery. One patient was admitted because of a vasovagal reaction following the anesthesia, she recovered fast and was discharged after a few hours of observation. One patient was admitted because of postoperative pain and discharged the next day, she had a prolonged postoperative recovery with pain and subfebrilia. One patient underwent laparotomy due to major intra-abdominal bleeding.
Postoperative complications occurred in another five patients (12%) without need for hospitalization (infected intra-abdominal haematoma, urine retention, cystitis, cystitis combined with wound infection and pneumonia).
Conclusion: Laparoscopic supracervical hysterectomy as an outpatient procedure is a safe and highly acceptable treatment.

35 Day case thyroid surgery

A. Symes, A. Sahai, T. Jeddy. *Basildon Hospital, UK*

Introduction: In the United Kingdom patients have traditionally been observed post-operatively in hospital for up to 72 hours following thyroidectomy. This resulted from concerns over potentially fatal complications such as airway compromise, haemorrhage and severe hypocalcaemia. Day case thyroid surgery, however, is now carried out routinely in some centres in the USA with no increase in complication rate or mortality. In the UK, day case thyroid surgery is not established and no series exist.
Material and Methods: Pre-operative screening was carried out in a dedicated nurse-led assessment clinic, with patient selection following UK national day surgery guidelines. A standard operative technique was employed. Patients were discharged according to strict criteria and returned the following morning for review and removal of drain/s.
Results: Between September 2001 and January 2005, 66 elective day case thyroid operations were performed with data collected prospectively. 57 were female (age range 22–69, mean 46.9) and 9 were male (age range 34–65, mean 46.9). 22 total thyroidectomies, 38 hemi-thyroidectomies and 6 completion thyroidectomies were performed. The mean operative time was 75.4 minutes (s.d. 18.5). Intra-operative blood loss was minimal. The mean weight of gland was 26.2 g for hemi-lobectomy and 33.5 for total thyroidectomy. 64 patients were discharged within 8 hours of surgery.
Two patients were admitted overnight for observation: one whose drain fell out, and the other for social reasons. There were no deaths, and complications included 1 patient with symptomatic hypocalcaemia who was readmitted 5 days after surgery, and 1 patient with permanent recurrent laryngeal nerve palsy.
Conclusion: With careful patient selection ambulatory thyroid surgery is feasible and safe with comparable complication rates to previous day case studies.

36 Give the patients the choice – walk in walk out (WIWO) hernia clinic

D.R. Leff, R.P. Bhutiani. *Central Middlesex Hospital, UK*

Objectives: Patients with an Inguinal or Femoral hernia make at least 3 hospital visits and wait 41–53 weeks for the operation. 10–15% of patients either do not attend or are cancelled due to bed shortage, lack of theatre space or are unsuitable for General or regional anaesthesia.
We have created a 'WIWO' hernia clinic, the first of its kind within NHS where patient is given a choice at the GP surgery to have their operation under local anaesthetic, by a single hospital visit and on the date of their choosing to fit in with their life and work.
Patients and Methods: An e-mail containing 'Instructions to the patients' and 'Patients suitability for 'WIWO' clinic' was sent to each GP in the area. The GP gave each suitable patient the instruction booklet and faxed a referral letter to the consultant's (RPB) scheduler. The patients rang the scheduler to make an appointment on a suitable date.
Results: Of 72 patients referred in six months 88.9% had successful 'tension free' mesh repair under local anaesthetic. 6.9% of patients were (n = 5) inappropriate referrals (Bilateral or recurrent hernias), and 4.1% (n = 3) did not attend their appointment.
Conclusion: Patients with unilateral reducible primary inguinal hernias, regardless of ASA status can safely have 'tension free' mesh repair under a local anaesthetic as a day case on the date of their choice. This WIWO clinic has shown a significant reduction in DNA and cancellation rates at a financial saving to the trust.

37 Teaching clinical skills in minor and ambulatory surgery – the European "medskills" project (Leonardo da Vinci programme)

A. Staniszewski, D. Kurpas. *Dept. of Family Medicine, Wroclaw Medical University, Wroclaw, Poland*

"MedSkills" is a pilot project to be carried out between 2004 and 2007 under the auspices of the European Community Action Programme on Vocational Training 'Leonardo da Vinci'. The promoter of this project is the Free University of Brussels, and the partners come from six European countries: Belgium, Greece, Italy, Poland, Spain, and the United Kingdom.
The project aims to create a unique WWW realistic training and learning environment for evidence-based medical skills, and to develop multimedia education material: the Web portal with a correlated collection of CDs, DVDs and virtual reality applications. This should improve the competence in skills of all target groups, the quality of, and access to continuing vocational training.
The main modules contain information on common medical emergencies such as respiratory difficulties, chest pain, angina, shock, burns and urgent delivery. Among the 13 work packages are also: virtual reality and medical imaging, medical fundamentals (including telemedicine, basic and advanced life support, frequent wounds and fractures), and minor/ambulatory surgery.
The "minor/ambulatory surgery" module will provide accurate, practical information and instruction in the most commonly performed outpatient surgical procedures and techniques with a comprehensive, evidence-based background in theory and principles. Special consideration will be given to safety and medicolegal issues.
The Department of Family Medicine of the Wroclaw Medical University has been charged with co-ordination of the "minor/ambulatory surgery" and "burns" modules. The official web site of the EU project "MedSkills" is available at http://www.medskills.net/index.php. It contains detailed information on the project and the latest news and developments.

38 Quality indicators in Ambulatory Surgery in General Surgery, Analysis of 7 years of experience in Fundación Hospital Alcorcón

P. Hernandez, J.A. Rueda, C. Fiuza, A. Alvarez, C. Loinaz, A. Quintans. *Fundación Hospital Alcorcon, Madrid, Spain*

Objective: To analyse the results in Ambulatory Surgery (AS) in General Surgery Unit from 1998 to 2004, with special remarks in cancellation rates, unplanned admission rates, preoperative mean stay and postoperative mean stay.
Patients and Methods: All patients operated on AS in General Surgery Unit from 1998 to 2004 were included in a register. Data included were: sex, type of anaesthetic technique, diagnostic, cancellation rate and their causes, and unplanned admission rates and their causes. In our centre, AS was designed as an activity, not a Unit, Operating rooms and surgical programme are shared with in-patient surgery. All surgeons and all anaesthesiologist perform AS. The timetable of surgery was from 8.30 am to 3 pm. In 2004, began an afternoon surgery programme and timetable was prolonged to 8 pm.
Results: In this period, we have operated on AS 5288 patients (46.2% of elective major surgery, excluding minor surgery). The rates each year were: 1998 = 42.3%; 1999 = 48.6%; 2000 = 46.8%, 2001 = 46.3%, 2002 = 46.6%; 2003 = 47%; 2004 = 46%. More frequent pathologies were: 1426 inguinal hernia, 1357 vascular access for haemodialysis, 975 pilonidal cyst, 342 anal fissure or fistula, and 325 umbilical hernia. Local anaesthesia was used in 60% of cases, regional anaesthesia in 30% and general anaesthesia in 10%. Cancellation rate was 8% and the year evolution was 1998 = 7.4%, 1999 = 9.2%, 2000 = 7.8%, 2001 = 8.6%, 2002 = 8.3%, 2003 = 6.3%, 2004 = 7.7%. More common causes were: no-show patient 47%, illness 15%, and insufficient surgery time 14%. Unplanned admission rate was 6.5%, and each year rate was: 1998 = 6.1%; 1999 = 8.6%; 2000 = 7.7%; 2001 = 6.1; 2002 = 5.3%; 2003 = 2.7%, 2004 = 8.8%. Causes of unplanned admission were anaesthetic in 38% (urinary retention and hypotension, the more common) and surgical in 38% (more extensive surgery and pain). Mean stay at the Unit was 441 min (median 404 min) and mean postoperative stay was 198 min (median 189 min). Inguinal hernia had the most prolonged postoperative stay (440 min) and pilonidal cyst had the least (87 min).
Conclusions: AS rate remains stable around 46%. Cancellation rate was stable and no-show patient was the main cause. Unplanned admission rates were higher in 2004 due to afternoon surgery programme. We need to perform modifications in our policy to improve our figures.

39 Effectiveness and patient satisfaction of day case laparoscopic cholecystectomy

D. Bandyopadhyay, S. Herpe, S. Moorehouse, B. Khan, C.R. Kapadia, E.P. Dewar. *Airedale General Hospital, UK*

Objective: With the advancement of anaesthetic techniques, facilities of day surgery unit and increase in surgical experience, we aim to assess the effectiveness and patient satisfaction of day case laparoscopic cholecystectomy.
Method: All patients fulfilling day surgery criteria were included in the study over a specified time period of 6 months. Anaesthetic techniques and post-operative advice were standardised. Incidence of inpatient stay was analysed. A postal questionnaire was offered to the day case patients about adequacy of pre-operative information, pain and sickness before discharge and on 1st post-operative day, expectation of pain at home, reasons for GP consultations following discharge and overall satisfaction.
Results: Eighty one patients were admitted for day case laparoscopic cholecystectomy. Six patients (7.4%) were not discharged from the day unit because of late surgery and recovery in 3, and pain and vomiting in another 3 patients. Response rate to the questionnaire was 83%. Ninety five percent of the respondents were happy with the pre-operative information. Pain was nil/mild in 52% & 72% and sickness was present in 35% & 29% of the respondents before leaving the hospital and on 1st post-operative day respectively. Pain was less or equal to what was expected in 80.5%. Twelve percent and 36% patients consulted their GP for pain and wound respectively. Ninety four percent of the respondents was very satisfied and would have similar operation as a day case surgery in future.
Conclusion: Day case laparoscopic cholecystectomy is a safe and effective service with high patient satisfaction.

40 Thyroidectomy in ambulatory surgery and overnight stay surgery

W. Vásquez, F. Ruiz, J.M. Asencio, E. Bastida, S. Agustí, M. Zaballos, J.R. Polo. *Hospital Universitario Gregorio Marañón, Madrid, Spain*

From January 2004 to January 2005, 90 thyroidectomies were performed at the 3rd Service of General Surgery. 72 out of 90 were performed in the afternoon and discharged from the hospital the following morning after surgery (unilateral lobectomies and total thyroidectomies). In this group of overnight stay discharge after the operation varies from 14 to 18 hours. Drainages were removed before discharge in all the patients. Patients with total thyroidectomy were discharged with routine prophylactic treatment for temporary hypocalcemia. (Oral calcium and calcitriol). PTH was performed the day after surgery and the aforementioned treatment was modified according to the PTH level.
12 patients were operated on at the Ambulatory Surgical Unit under general anesthesia. All the patients had thyroid nodules with low risk for carcinoma (between 20 and 60 years of age, less than 5 cm of diameter, and cytology without signs of malignity). Intraoperative pathology was not performed. Possibility of a second operation for completion thyroidectomy, in case of definitive malignity, was discussed previously with the patient. Patients were discharged between 4 and 7 hours after surgery. In all cases definitive pathologic studies confirm the absence of malignity. No complication was observed in this group of patients. After gaining more experience with unilateral lobectomy, selective cases of total thyroidectomy should be considered in the future.

41 Antibiotic prophylaxis for hernia repair with P.A.D. technique

E. Baraglia, G. Bonotto, E. Caronia. *Hospital Oderzo, Italy*

The aim of this study is to determine whether the use of prophylactic antibiotics is effective in preventing postoperative wound infection in mesh inguinal hernia repair. From March 2003 to November 2004, 213 male patients with primary inguinal hernia were operated according Valenti's P.A.D (Self-regulating dynamic prosthesis) technique in Day Surgery (89% pts. in local anesthesia). In this series were excluded recurrent hernias, bilateral hernias,femoral hernias, inguinoscrotal, ASA > 2, hernia with operating time more than an hour, and situation at risk such as diabetes and obesity. 98 patients (mean age 59.2, range 24–83) received a single dose of 2 g of cefazolin preoperatively. The control group consisted of 115 patients (mean age 59.4, range 19–92). For both groups the mean operative time was 45 minutes. Patients were controlled at one week and at one and two months. None patients of the antibiotics series developed wound infection. Only one patients of the control series developed infection, confirmed by coltural test. No seroma occurred in both groups. The Fisher's exact test showed no significance (0.54). Although in literature a recent Cochrane meta-analysis (2003) concluded that antibiothic prophylaxis for hernia repair cannot be firmly recommended or discarded, we conclude that, in our experience, prophylaxis is of no benefit to low risk patients undergoing inguinal primary hernia with P.A.D. technique.

42 Initial results of clinical trial of day case Ligasure versus stapled haemorrhoidectomy

D. Bandyopadhyay, T. Saleem, B. Khan, C.R. Kapadia, E.P. Dewar. *Airedale General Hospital, UK*

Objective: Randomized clinical trials comparing open haemorrhoidectomy with either Ligasure or stapling have shown the latter techniques to be less painful resulting in qu icker recovery. There is no reported trial comparing the two new techniques. Our aim is to compare the efficacy of day case Ligasure and stapled haemorrhoidectomy.
Method: Data was collected prospectively from the first 34 patients taken from two colorectal surgeon's practice and allocated to either of the procedures according to the consultant's preference. Anaesthesia and post-operative advice were standardised. Postoperatively all patients were reviewed in the clinic at 8 weeks by a surgeon blinded to the procedure.
Results: Fourteen patients had Ligasure and 20 had stapled haemorrhoidectomy. Median age was 54 in Ligasure and 56 years in stapling group. Sex ratio was equal. Median operating time was 19 and 18 minutes for Ligasure and stapling respectively. All cases except 2 in each group were completed as day cases. Postoperatively 71.4% of Ligasure and 55% of the stapling group had pain score >3 on visual analogue scale [1–10; 10 = severe pain] ($p = 0.332$). There was no major complication in either group. Median time to return to work was 14 in Ligasure and 12 days in stapling group ($p = 0.394$). Eighty-five percent patients of Ligasure and 75% of stapling group were very satisfied [score > 8 on a scale of 1–10] ($p = 0.447$).
Conclusion: With the limitation of small sample size, early results of Ligasure and stapled haemorrhoidectomy have shown both to be equally safe and effective as day cases.

43 Experience on ambulatory surgery in thoracoscopic sympathicotomy for the treatment of primary hyperhidrosis

A. Arroyo, J. Ayarra, M. Congregado, J. Loscertales, R. Jiménez, J.C. Girón, C. Arenas. *Department of General and Thoracic Surgery, University Hospital Virgen Macarena, Seville, Spain*

Objectives: The length of hospital stay is an important factor of cost and psychological discomfort in the treatment of hyperhidrosis by endoscopic thoracic sympathicotomy (ETS). This study aims to confirm that ETS can be performed on an outpatient basis providing improvement in quality of life of patients.
Patients and methods: Fifty four patients underwent ambulatory thoracoscopic sympathicotomy between March 2003 and February 2005. Sex: 35 female, 19 male; Age 15–44 (mean age 27.52). Under general anesthesia using a double lumen endotracheal tube and in a semi-sitting position with arms abduced and two ports of acces, the sympathetic chain and the communicating rami were severed at different levels according to hyperhidrosis location. Patients were discharged from hospital after 323 to 416 minutes. The only abnormal post-operative event observed was insignificant residual pneumothorax, found in 3 (5.6%) of the thoracic X-rays taken. Once discharged patients are followed up for a year, answering a questionary about pre- and postoperative quality life at least one month after surgery.
Results: 98.1% of patients referred drastical improvement in their quality of life. One of them (1.9%) referred the same quality of life (basically due to compensatory hyperhidrosis). 48.2% of patients referred compensatory hyperhidrosis.
Conclusions: Thoracoscopic sympathicotomy in an outpatient basis is a fast, safe, economic, and effective method for the treatment of hyperhidrosis palmaris that increases quality of life. Nevertheless, appearance of compensatory hyperhidrosis is a major drawback that needs of further study.

44 Outpatient thyroidectomy. A comparative prospective study beetwen local and combined local/general anesthesia

J.M. Sanchez-Blanco, G. Recio, A. Guerola, R. Jurado, C. Torres. *Hospital Universitario Valme, Seville, Spain*

The recent reintroduction of local/regional anaesthesia (LRA) for thyroidectomy has facilitated this surgery in an outpatient setting. Some patients do not accept the LRA procedure due to apprehension. The aim of this study was the evaluation of two anaesthesia procedures for outpatient thyroidectomy.
Patients and Methods: Adults needing thyroidectomy were prospectively selected following outpatient surgical criteria. Giant goiter or procedures of an expected protracted duration were excluded. LRA plus sedation was proposed and accepted by 63 patients (group 1). If the patient did not accept LRA, a combined LRA and orotracheal intubation was proposed an accepted by 88 patients (group 2). The surgeon performed LRA by C2-C3 deep cervical plexus block. In the group 1 propofol was used for sedation; in the group 2 mivacurium or cisatrachurium were used for intubation. Anesthesia was maintained with propofol and little doses of fentanyl or remifentanyl. Surgical technique was the same in both groups. There were not differences in age ($p = 0.48$), gender ($p = 0.15$), BMI ($p = 0.49$), anesthesia risk ($p = 0.96$), indication of surgery ($p = 0.35$), pathology ($p = 0.92$), and extension (unilateral or bilateral) of thyroidectomy ($p = 0.32$).
Results: There was no differences in surgical time ($p = 0.97$), weight of the specimen ($p = 0.3$), intraoperative problems ($p = 0.73$), postoperative nausea and/or vomiting ($p = 0.73$), postoperative pain ($p = 0.48$) and requirements of postoperative analgesics ($p = 0.48$). The hour of discharge was earlier in group 1 (6.53 ± 0.19 vs. 7.53 ± 1.9 hours; $p < 0.001$). Need for admission was higher in group 2 (9.6% vs. 19.3%) but did not reach statistical significance ($p = 0.11$). Morbidity was similar ($p = 0.14$) with a case of PO hemorrhage in each group and 3 cases (group 1: 1, group 2: 2) of temporary laryngeal nerve palsy, but no permanent paralysis. Satisfaction with the procedure was very high/high in 95.2% of the patients of the group 1 and 92.04% of the patients of the group 2 ($p = 0.52$).
Conclusions: Using specific selection criteria outpatient thyroidectomy under local/regional anaesthesia is feasible and highly satisfactory for the patient. Recovery with LRA is faster; combined local/general anesthesia is useful for anxious patients that did not accept LRA.

Posters

45 Endometrial ablation with microwave under local anaesthesia

M. Deeny. *Stobhill Hospital, Glasgow, Scotland*

A method is described for treating women with microwave endometrial ablation using temazepam sedation, pre-emptive analgesia with diclofenac and cervical infiltration with prilocaine and octapressin. Pain scores were recorded on a Visual analogue score. A modification to the preoperative preparation, using norethisterone-induced withdrawal bleeding instead of gonadotrophin releasing hormone analogue therapy, has allowed us to carry out treatment with less resistance to cervical dilatation and reduced patient discomfort. Treatment outcome is satisfactory in 90% of patients, and all patients would agree to having the operation done again, having had the experience of the procedure.
The method described allows us to treat women for whom regional or general anaesthesia is less safe, allowing them the benefits of this effective treatment for menorrhagia due to dysfunctional uterine bleeding and also fibroids up to 14 weeks size.

46 Patient satisfaction following major oculoplastic surgery using local anaesthesia plus sedation in UK centre

J. Shibib, R. Zia, C. Davies. *Channel Day Surgery Centre, William Harvey Hospital, East Kent NHS, UK*

Objective: To assess patient satisfaction during and after oculoplastic surgery under local anaesthesia and sedation (midazolam/propofol). The expectation is to recruit 50 patients by April 2005.
Materials and Methods: At time of submitting this abstract, questionnaire was sent by post to 22 patients who had various major oculoplastic procedures including DCR, ptosis surgery, excision of lid lesions of all sizes and lid reconstruction. DCR patients received peribulbar injection of preservative free 2% lignocaine. Ptosis surgery was done with intratrochlear nerve block using 1–2 ml of preservative free 2% lignocaine. Reconstruction surgery was done with local injection of 2% xylocaine plus adrenalin with top up as required. The questionnaire was designed to assess various features of pain during and after the surgical procedures. Patients were also asked whether they would be willing to undergo similar anaesthesia again if required.
Final opinion was taken about the anaesthetic procedure being satisfactory or not.
Results: Of the 22 patients, only 3 patients (13.64%) complained of pain during the procedure. All three had stabbing pain. 5 patients (22.72%) required some kind of painkillers in the recovery, 2 (9.09%) of whom required ice packs in addition to painkillers to successfully obtain pain relief. 15 patients (22%) had a good night sleep, 6 patients (27.7%) had interrupted sleep whereas only 1 patient (4.55%) had a bad sleep. 8 (36.36%) patients experienced pain on first postoperative day and 2 patients (9.09%) experienced nausea. 21 patients (95.45%) were satisfied and were willing to have similar anaesthesia if required in future. Only 1 patient (4.55%) was unsatisfied and did not approve of the technique.
Conclusion: Major oculoplastic surgery can be safely carried out as day care procedure in UK centres if appropriate local anaesthesia is combined with sedation. The patients were largely satisfied with no post-operative nausea and pain. Few patients who did experience some form of pain or interrupted night sleep were also overall satisfied by the choice of anaesthesia and were ready to opt for a similar choice of anaesthesia if required in future. Only one patient was unsatisfied with the procedure due to postoperative pain and interrupted sleep.

47 Gynecologic ambulatory surgery unit: Our 10 years experience

P. Delofeu, J.F. Garrido, A. Sapé, L. Martínez, R. Navarro. *Hospital Municipal de Badalona, Spain*

We present our results from July 1994 until July 2004. Over this period of time, 1141 patients were operated. The most frequent procedures were: hysteroscopy (47.5%), laparoscopy (19.5%), breast surgery (14%) and vulvovaginal surgery (6%). We practised the following anesthetic techniques: local (34%), paracervical (32%), general (23%), intradural (8%) and others (12.5%). We had 37 (3.2%) immediate hospital admittance; vomits were the main cause, and the posterior re-admittances were 5 (0.4%).
Through those years we have stopped carrying out some procedures like uterine curettage, replaced with diagnostic hysteroscopy, and we have added other procedures like minilaparoscopy under local anesthesia with sedation (30 cases), and surgical hysteroscopy. Our last goal was to begin the sentinel node biopsy in breast cancer (3 cases) and vaginal hysterectomy (1 case). During that time we have rationalized our surgical activity: inpatient surgery 53%, ambulatory surgery 26% and office surgery 21%. With the hospitalization decrease, the medical waste was diminished and we were able to increase the productivity.

48 Gynaecologic ambulatory surgery unit: vaginal surgery as a resort

P. Deulofeu, J.F. Garrido, J. Codina, M. Pijoan, F. Rey, I. Fernández. *Hospital Municipal de Badalona, Spain*

Since we established our Gynaecologic Ambulatory Surgery Unit (ASU) in July 1994, we have added some new procedures like the Neugebauer–Le Fort operation, started in 1996, and the Manchester or Donald–Fothergill operation, started in 1997. Over the past 8 years (1996–2003) we have carried out 1015 procedures in the ASU; that required 35 admittances (3.4%). The Le Fort operation consists of uterus invagination with vaginal obliteration in old women with a grade III uterine prolapse. We operated on 53 patients; 18 of them in the ASU (substitution index 34%). The last ones had an average age of 78 years (rank between 71–92 years old). We practised local anesthesia in 14 patients (78%) and intradural anesthesia in 4 patients (22%). The average surgery time was 51 minutes (rank between 30–75 minutes). We had 3 admittances (16.5%). The Manchester operation consists of the amputation of the uterine cervix when it is elonged and, generally, hypertrophied. At first, we indicated it in women successfully operated on for urinary incontinence and, afterwards, we included those patients that wished to conserve their uterus, always without pregnancy purpose. We operated on 17 patients, 5 in the ASU (substitution index 29.5%). The average age of patients operated on for incontinence was 55.5 years (rank between 40–68 years old) and of the rest of the patients was 45.5 years (rank between 36–51 years old). We practised intradural anesthesia in 82% of the cases, and general in 18%. We had 2 admittance cases (40%).
Both procedures are a resort in front of vaginal hysterectomy in very selected patients. The experts and the patients together with the relatives reach a consensus on the procedure.

49 Day care surgery: the future of modern surgery

M.M. Bagani, T. Naresh Row. *Abhishek Day Care Institute & Medical Centre, India*

A retrospective analysis of 3097 cases from a single centre, dedicated to ambulatory surgery, over a period of 4 years, from June 2000 to May 2004, has been compiled for presentation, to promote day care or ambulatory surgery, as a speciality, in Mumbai, India.
The reasons for the trend toward increasing outpatient and office procedures are clear: lower cost, greater efficiency, and improved patient convenience. Accomplishing the procedures described in this presentation safely, swiftly, and successfully will serve patients and surgeons, well.
The concept of day care or ambulatory surgery is as old as surgery itself.
Certain surgical procedures, owing to their magnitude, have to be done as indoor case. However, there are some procedures, which can be done on as an 'day case'. With the advent of better anaesthetic agents, increased surgical experience and better patient awareness, has helped evolve day care surgery into an art. It has been seen that 60% of cases in a general surgeon's surgical list can be done as day case.

50 Excision & closure of pilonidal sinus as day case

D. Pinak, M.M. Begani, T. Naresh Row. *Abhishek Day Care Institute & Medical Centre, India*

Aim: To show the possibility of local block for pilonidal sinus excision & closure.
Objective: With proper case selection and practice, field block anaesthesia can be used for excision and primary closure of pilonidal sinus.
Material and Method: A retrospective analysis of 30 cases of pilonidal sinus patients treated by excision and primary closure, from a

single centre, over a period of 4 years, that is, June 2000 to May 2004, as day case, is illustrated as a possibility in experience hands.
Use of field block with a combination of 2% lignocain hcl & 0.5% bupivacain, with iv sedation was done in all the cases. Dye sonogram was performed on table, with complete excision of all the tracts, followed by primary closure done in two layers with fine & medium nylon was accomplished. Larger cavities has a simple iv drain kept for 2–3 days.
Results: 2 patients had recurrence, where dehiscence of wound and non-healing required repeat surgery.
The rest of the patients did not have any untoward complication and returned to normal activity within 48 hours.
Conclusion: Excision and primary closure of pilonidal sinus can be safely, performed under local field block, in trained hands.

51 Unexpected hospital admission in ambulatory surgery

M.C. Casamayor, A. Jimenez, C. Artigas, J.A. Gracia, M. Elía, M. Martinez. *Hospital Clínico Universitario Lozano Blesa, Zaragoza, Spain*

Background: Ambulatory surgery is trying to implement quality control programs around the world. Among the monitorized indicators used in these programs, the rate of unexpected hospital admissions is the most common.
Methods: Between April 1995 and February 2005 a total of 10,000 patients were operated on in a multidisciplinary ambulatory surgery unit. According to ASA classification, patients were divided in ASA 1, 54.1%, ASA 2, 41.1% and ASA 3, 4.8%. General anaesthesia was applied in 16.4% of cases, spinal in 28%, local in 29.8% and retrobulbar in 20.9%. Cataract surgery, hernia repair and varicose vein surgery were the most common procedures. Data were obtained from the clinic data base of the unit created by Stat View 5.0.1 program.
Results: A total of 238 patients (2.4%) suffered unexpected hospital admission.
This rate varied from 5.3% in 1995 to 1.4% in 2004. The most frequent causes of admission were: Surgical difficulties, dizziness, nausea-vomiting and wound complications. Admissions were more common after hernia repair procedures, plastic surgery, testicle surgery, ASA 3 patients and general anaesthesia.
Conclusion:
1. Increasing experience in ambulatory surgery improves the rate of hospital admission.
2. Unexpected hospital admissions were related to different surgical procedures, ASA physical status and type of anaesthesia.

52 Postoperative complications after ambulatory surgery

A. Jiménez, J.A. Gracia, M. Elía, C. Artigas, M. Casamayor, M. Martínez. *Hospital Clínico Universitario Lozano Blesa, Zaragoza, Spain*

Background: Day surgery is becoming more common due to its cost/effectiveness as well as patient acceptance. The increase of number of procedures and their complexity are related to improvements in anaesthesia and surgical technique. The aim of this study is to identify the most frequent postoperative complications in a multidisciplinary day surgery unit in order to prevent them.
Methods: A total of 10,000 patients were operated on between April 1995 and February 2005. Data were obtained from the clinic database of the day surgery unit. Adverse events registered during operation, early and late recovery were analysed. Statistical analysis was done with Stat View 5.0.1 program.
Results: Adverse events during operation: 1.7% of patients. The most frequent were unexpected surgical complexity and spinal anaesthesia failure.
Postoperative complications: 2 cases of major complications were registered (0.02%), a septic shock after a prostatic biopsy and a respiratory insufficiency after a septal deviation correction. 12% of patients suffered minor complications: urinary retention 6.2%, severe postoperative pain 1.8%, wound infection 1.2%, wound disruption 0.7%, nausea-vomiting 0.5%, and wound bleeding 0.5% were the most frequent.
The procedures causing most complications such as postoperative pain, postoperatory nausea-vomiting and wound infection were hernia repair, anal surgery and hallux valgus correction ($p < 0.01$). Urinary retention is related to spinal anaesthesia ($p < 0.01$).
Conclusion: Major complications are uncommon in ambulatory surgery, but minor complications rate is around 10% in worldwide series causing additional expending. Urinary retention, bad pain relief and wound infection were the most common adverse events. Pre-emptive medication is necessary to reduced postoperative morbidity.

53 The safety of laparoscopic cholecystectomy for acute cholecystitis in the early period

A. Uzunkoy. *Harran University Education and Research Hospital, Turkey*

Objective: The aim of this study was to determine whether laparoscopic approach for acute cholecystitis in early period had an impact on postoperative complications and conversion to open procedure.
Methods: The data of 452 cases was evaluated and the patients divided two groups as acute or chronic cholecystitis. The diagnosis was based on clinical, laboratory test and abdominal ultrasonography findings. The cases of acute cholecystitis underwent laparoscopic cholecystectomy operated on in the first 72 hours. The demographic and clinical findings, operative times, intraoperative and postoperative complications, convention rates, postoperative hospitalization times and mortality were evaluated.
Results: Thirty-nine cases were acute cholecystitis and 413 cases were chronic cholecystitis. There was no significantly difference between groups about all of evaluated factors ($p > 0.05$). There was one mortality in the group of chronic cholecystitis.
Conclusion: Laparoscopic cholecystectomy for acute cholecystitis in the early period is safe and effective method. This approach provides medical and economic advantages.

54 Surgery of elderly patients in day and one-day hospital

A.S. Lisitsyn, S.V. Dergachev, L.F. Vinnik, A.V. Marushkin, M.A. Kuzin. *St.-Petersburg, Russia*

Demography situation in majority of countries in Europe and Russia caused quantitative growth of elderly (60 years and more) people. This group of people often suffer from several chronic diseases which mostly synergic. This brings a serious problem in surgery because any surgical interventions overloads all systems of the organism of elderly patients including their psychological status. It should be kept in mind that the disease subjected to surgical correlation is often at a rather advanced stage.
Under current social and economic conditions treatment of the elderly becomes unprofitable and, thus, unreasonable for specialized hospitals. The patients of the mentioned category, thus, are often hospitalized by the emergency ambulance with complicated surgical diseases (strangulated external abdomen hernias, acute thrombophlebitis, etc.) and need urgent specialized surgery.
At the same time the experience obtained by modern practical medicine demonstrates that there is a large group of surgical diseases of elderly patients which may be treated early using in-hospital substituting technologies bring improvement of social and psychological status, disablement degree of patients and often prolongation of their lives. The following circumstances ensure these effects: high qualified personnel of the Outpatient Surgery Centers should provide favorable results of surgery, there is minimal risk of inter-hospital infection and other complications. Staying at home in familiar environment, enjoying support from the relatives these patients may be activated earlier being in tight contact with the surgeon who performed the operation till their complete recovery. Their return