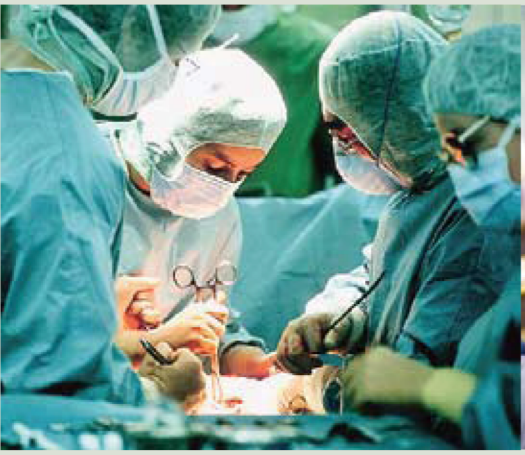
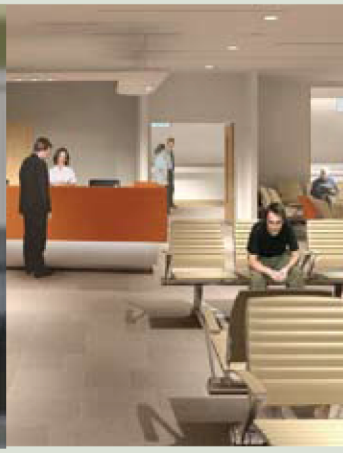
AMBULATORY SURGERY

International Journal covering Surgery, Anaesthesiology, Nursing and Management Issues in Day Surgery

IAAS 13th International Congress on Ambulatory Surgery

27th – 29th May 2019 Porto, Portugal



Presented Abstracts

The Official Clinical Journal of the
INTERNATIONAL ASSOCIATION
FOR AMBULATORY SURGERY

VOLUME 25.2 JUNE 2019

Editorial

Mark Skues, Editor-in-Chief

The 13th Congress of the International Association of Ambulatory Surgery took place in Porto, Portugal, on 27th–29th May, 2019. Thanks are due to Carlos Magalhães, Vicente Vieira and all of the convening Scientific and Congress Committees for their exceptional hospitality and organisation that made the meeting such a great success, together with sister organisations APCA (Associação Portuguesa de Cirurgia Ambulatória) and ASECMA (Asociación Española De Cirugía Mayor Ambulatoria).

This edition of *Ambulatory Surgery* contains copies of the oral abstracts that were presented at the Congress over the three day period. I hope you find them useful.

With the changes in structure of the IAAS that occur every two years, Douglas McWhinnie has now taken up the post of President of the Organisation. As you know, Doug was previously an Editor of this publication, and has therefore relinquished the post. Ian Jackson, a previous president of the IAAS, and also, previous Editor of the *Journal of One Day Surgery*, has been appointed in his place. I would like to thank Doug for all his support over the past few years and wish him well in his new role. Ian may be contacted at *drianjackson@tollerton.net* with queries, comments and submissions to the Journal. Both he and I look forward to hearing from you.

Mark Skues
Editor-in -Chief

The Telephone Call Follow-Up and Satisfaction In Paediatric Patients in Ambulatory Surgery: A Systematic Literature Review

Susana Rute Ferreira Gregório Camarinha, Margarida Reis Santos; Ana Paula Prata
Escola Superior de Enfermagem do Porto

Introduction: Paediatric surgery in the outpatient clinic has been constituted as a surgical option more frequently. This fact has contributed to the decrease of the waiting lists and to the reduction of the time of permanence of the children and families in the hospital. Considering that it is essential for health institutions to provide indicators of quality of care, the follow-up phone call is one of the recommended procedures for assessing pediatric / family client satisfaction undergoing outpatient surgery.

Objective: To obtain scientific evidence to understand the importance of the follow-up phone call in the satisfaction of children / parents undergoing outpatient surgery.

Method. Systematic Review of Literature by model Joanna Briggs®. Research conducted in databases: CINAHL®, MEDLINE®, COCHRANE CENTRAL REGISTER OF CONTROLLED TRIALS®, SCOPUS® AND WEB OF SCIENCE®. Keywords: Children, Child, Telenursing, Telephone, Follow-up, Parent satisfaction, Ambulatory surgery. Qualitative and quantitative studies, published in Portuguese, English and Spanish, were considered from 2007 to 2018. Research conducted independently by two researchers. Disagreements were discussed with a third researcher. The methodological quality of the studies was evaluated by the instruments recommended by Joanna Briggs®.

Results: There were 336 studies, eight of which fulfilled the inclusion criteria. The results show that the parents of the children undergoing ambulatory surgery show satisfaction with follow-up phone call, since it gives them security, provides timely answers to their doubts and concerns, and minimizes time and distance in direct communication with health professionals.

Conclusions: The follow-up phone call emerges as an essential tool for the monitoring of protocol effectiveness indicators, team efficiency, fitness structure, satisfaction level with outpatient experience and with the team. The results demonstrate the positive impact of the follow-up phone call on the involvement / commitment of health institutions and professionals and on postoperative pain control. They also reveal the importance of nurses providing pediatric clients with real-time support through the follow-up phone call, minimizing unnecessary hospital travel.

Close the Door, The Effect of Traffic in the Operating Theatre

Maria Saenz Jalon[1,3]; Carmen Maria Sarabia Cobo[2]; Marta Santiago[1]; Begoña Velez[1]; Gema Canal[1]; Gema Rodriguez[1];Sandra Espeso[1]; Sara Valverde[1]

1 Hospital Universitario Marqués de Valdecilla; 2 Cantabria University; 3 Instituto INVESTIGATION Valdecilla (IDIVAL)

Healthcare-associated infections, defined as infections acquired during therapy for another condition and not present or incubating at the time of admission, comprise a significant burden of illness. Postoperative nosocomial infections remain a major problem in health care facilities, resulting in extended length of stay, substantial morbidity and mortality, high excess of cost, and less frequent cause of death in the surgical patient. Operatión room traffic is correlated with distractions, surgical site infections, air flow disturbances, contamination events, a lack of efficiency, and a lack of patient privacy.

Aims: This study had two objectives: 1) define the incidence of door opening during surgical procedures providing in our institution, a comparison between the two types of procedures (major and ambulatory surgeries) 2) identify the etiology of door opening in order to develop a strategy to reduce the incidence of traffic in the operating room. Observers collected data during 28 days, and 76 procedures. Each door has a commercially available electronic door contacts, that connect to the door control panel and door security data base.

Results: Time Door opening recorder: 99 min per day - Frequency door openings: 158.39 p/d. 28.57 p/h - Personal Entering / Exiting: 137p/d. 25.3 per hour TIME DOOR OPENING - Cardiac Surgery: 90.43 minutes per day - Ambulatory surgery: 120.71 minutes per day - Neurosurgery: 70.50 minutes per day - Traumatology: 110.2 minutes per day FREQUENCY DOOR OPENING - Cardiac Surgery: 155.29 times per day - Ambulatory Surgery: 133.29 times per day - Neurosurgery: 187.50 times per day - Trauma: 140.33 times per day PERSONAL TRAFFIC - Cardiac Surgery: 131.57 people - Ambulatory Surgery: 158.57 people - Neurosurgery: 140.33 people - Trauma: 120.50 people

Conclusions: Rates of door openings are unnecessarily high and represent an area where simple modifications of practice could enhance patient outcomes. Ambulatory procedures had high rates in: Personal Traffic (in all specialities: surgeons, nurses, and anesthetist) and time door opening. Data are in line with published US reports. Operating Room traffic also contributes significantly to surgical mistakes and their associated implications. We must to make an effort to reduce the incidence.

Subdural Haematoma In Ambulatory Care Settings: A Case Report

Andreia Fernandes[1]; Inês Morais[1]; Emília Raquel[2]; Lurdes Preto[1]; Edite Ribeiro[1]

[1] Centro Hospitalar Vila Nova Gaia/Espinho; [2] Centro Hospitalar Tondela-Viseu

Background: Spinal anesthesia (SA) is a common choice in ambulatory settings. It isn't technically difficult or time consuming, provides good surgical anesthesia, little patient complaints and short turnover time[1]. Significant adverse events, including neurologic injury like subarachnoid/epidural hematoma, are very rare[2]. Symptomatology can be misleading and delay diagnosis in outpatients. High level of clinical suspicion is mandatory.

Case Report: 51-year-old woman, ASA 2 (obesity, hypertension) proposed for knee arthroscopy in our ambulatory unit. No relevant neurological history. Normal preoperative study. SA performed in L3-L4 at first attempt (25G Quinck needle). Uneventful postoperative (PO) period. Discharge the next morning after enoxaparin administration (40 mg). At the 24h PO telephone interview, patient referred inaugural positional headache and nausea, without neurologic deficits. Partial response to paracetamol and caffeine. On the 5th PO day, patient seen in our urgency department due to persisting symptoms: headache, photophobia, nausea and vomiting. A cranioencephalic tomography was performed, revealing a minor subdural hematoma (SH). We decided on conservative treatment and vigilance. Postdural puncture headache (PDPH) managed with bilateral sphenopalatine ganglion block (0.5% ropivacaine) with relief after 5 min. She was discharged on the 16th PO day, asymptomatic. Discussion: PDPH is a frequent complication after SA. A change in its duration/intensity, focal neurological signs and no positional variation arises suspicion of SH. The latter is associated with difficult to perform and/or unsuccessful puncture, coagulability disorders or antiplatelet/anticoagulation therapy, none verified. Direct spinal cord trauma, vascular malformations or spinal stenosis2 (hardly perceived during the procedure) can also be responsible. We should always consider this rare complication when neurologic symptoms present hours/days after apparently regular SA. Close follow-up of symptomatic ambulatory patients is imperative and should lead to imaging exams (preferentially MRI) to confirm and treat the SH, invasively if indicated, to avoid permanent neurological damage. Doubtful or persisting signs shouldn't be automatically associated with commoner complications (like PDPH), especially in ambulatory settings. Since most headaches are treated without subsequent investigation, SH's true incidence can be higher than that currently acknowledged.

Improving the Rate of Day Case Laparoscopic Cholecystectomy by Non Clinical Change.

Pedro Cunha; Deirdre Anderson; Liz Sheehan; Hari Arunachalan
Homerton University Hospital NHS Trust

Aims: A majority of patients can be safely discharged on the same day after laparoscopic cholecystectomy. National rates of at least 60% are expected to be easily achieved and in the literature much higher rates have been reported. We audited our practice and implemented changes to improve our performance.

Methods: We used past audits and data sets from our laparoscopic cholecystectomy cases at our hospital and used national data base for hospital performance data for comparison. We identified our median success day case rate to be 59.4% - 66.4% depending on the data set used. We used univariate analysis detected risk factors for failed day cases and explored ways to mitigate them on a quality improvement project Categorical variables are expressed as the frequency and proportions (%). Categorical variables were analysed by chi-square test. P value <0.05 was considered significant.

Results: We altered the administrative process of ordering the patients on the operating lists as to increase the chances laparoscopic cholecystectomies were done first on the list. This immediately increased the success day care rate, sustained for one year after the list ordering change. Statistical analysis between before and after intervention also corroborated this (weekly success day case rate median value 75% from 66.6%, average 70.4% from 59.4%; diff 11%, 95% CI 2.3846 to 19.3408, Chi-x2= 6.242, p= 0.0125). Previous subgroup analysis from our dataset (data not shown) had revealed patients ASA1-2 were less likely to fail same day discharged compared to ASA3 patients. While the ASA1-2 group analysis did not show any difference between before and after list ordering change, the ASA3 group analysis suggested this group was the greatest beneficiary of the change. Supporting this hypothesis, when we comparing the percentages of success day case before and after the list ordering change, we found a statistically significant improvement of success rate of day cases on this group from 15.78% to 61.12% (Diff 46.11%, 95% CI 23.3103 to 63.01589; Chi-x2 15.435, p=0.0001).

Conclusion: We achieved an increase on successful day case laparoscopic cholecystectomy through a simple and cost-less change of administrative procedure. This was a marginal change on a typed list of patients resulting in great positive changes for our patients, surgeons and institution.

Improved Patient Satisfaction With the Use of iPad in Pre-Anaesthesia Education for Day And Same Day Surgery

Chung Siu Him; Cho So Yin; Cheng Tan Ning

Introduction: Pre-anesthetic clinic plays an important role in Ambulatory Surgery to ensure safe surgery. A well-prepared pre-operative education conveys peri-operative instructions but also empowers patients with details of operations and day admission issues. With advanced technology, a power-point on laparoscopic cholecystectomy is established for patients and presented through iPad. More visual illustration can enhance the absorption of knowledge and to reduce fear due to uncertainty. To investigate the acceptance and effectiveness of using iPad to provide perioperative care, a survey is designed.

Objective: To find out the effectiveness of applying iPad as the presentation media to patients who will undergo laparoscopic cholecystectomy.

Methods: 30 patients (Male: n = 11, Female: n= 19) aged from 33-79 were invited to join the project from 8 Oct to 10 Dec 2018 in the Pre-anaesthesia assessment. A satisfaction survey divided into two parts (a) Traditional paper briefing (b) iPad assisted briefing were given to patients. The power-point includes pathology of laparoscopic cholecystectomy, objective of the operation, the anesthesia method and risks, pre-operative instructions, patient journey of admission day, patients' duty in OT room, post-operative issues in both day and same day admission. Comparison was made between paper and iPad presentation of pre-operative preparations and education to the patients.

Results: The analyzed parameters showed significant improvements in applying iPad for patient education compared with traditional paper presentation. There are some areas for improvement identified: 1) more animations and voices in the power-point 2) patients prefer to obtain the information in advance

Conclusion: Application of iPad positively impacts on patient education in Pre-anesthetic clinic. Audiovisual education on various operations should be developed to meet patients' expectation. The use of QR code or web-linked access of the powerpoints allow patients to access the information in advance. Paperless education materials also reduce expenditure and lead to a green hospital.

Thoracic Sympathectomy Under Sedation and Local Anaesthesia – Report of a Series of Cases

Maria Ribeiro; Marta Coelho; Teresa Monteiro; João Caldeira
Centro Hospitalar Universitário Lisboa

Introduction: Thoracic sympathectomy is considered to be the most effective treatment for palmar and axillary hyperhidrosis. Traditionally, this procedure was performed under general anesthesia, with one lung ventilation. However, thanks to the evolution of the surgical technique, nowadays it's a minimally invasive endoscopic procedure, which makes it possible to perform under sedation with local anesthesia. Our goal in this study was to assess the efficacy and safety of sedation as an anesthetic technique for thoracic sympathectomy.

Materials and Methods: This was a retrospective study, conducted between June of 2017 and March of 2019. Data were collected from more than fifty patients, with ages between 19–44 years old, who underwent thoracic sympathectomy under sedation. All patients were subjected to a pre-anesthetic clinical assessment to make sure they were appropriate candidates to this procedure, fulfilling all surgical, anesthetic and social criteria for ambulatory surgery. Anesthetic technique consisted in sedation in addition to local anesthesia with lidocaine 2% and ropivacaine 0,75%. Immediately before the beginning of the procedure, a propofol infusion was initiated, aiming to obtain a state of moderate to deep sedation. For analgesic control, boluses of alfentanil were administered, anticipating the more painful steps of the surgery - insertion of the endoscopic trocars. Through the procedure, patients received supplemental oxygen trough a facial mask. Post operative analgesia and adequate nausea and vomit prophylaxis were ensured.

Results: During surgery all patients remained painless. Hemodynamic and respiratory stability were maintained throughout the procedure. No operative mortality or morbidity was recorded. All thoracic sympathectomies were performed successfully, with no record of complications, such as pneumothorax. There was no need to convert sedation into general anesthesia in any of these cases. Three patients received supplementary medication to obtain proper pain control in the post operative period.

Conclusion: Preliminary results show efficacy and safety of sedation associated with local anesthesia as an anesthetic technique for thoracic sympathectomy, avoiding possible complications associated with general anesthesia and one lung ventilation. None the less, there is still the need to expand the number of cases performed with this approach, so that we can proceed to a more detailed analysis.

Analysis of the Complications of Laser Fulguration in an Ambulatory Circuit Versus Transurethral Bladder Resection in Nonmuscle Invasive Cancer

Javier Mazuecos Quirós; Reyes Chaves Marcos; Cristina Baena Villamarín; Ignacio Osmán García; Guillermo Lendínez Cano; Carmen Belén Congregado Ruiz; José Manuel Conde Sánchez; Rafael Antonio Medina López
Uro-Oncology Unit, Urology and Nephrology Department, Biomedicine Institute of Seville, IBiS. University Hospital Virgen del Rocío. CSIC. University of Seville. Seville. Spain.

Background and Objectives: Laser fulguration (LF) is an accepted option for small recurrences in nonmuscle invasive bladder cancer (NMIBC). The aim is to evaluate the complications and the satisfaction of LF with flexible cystoscope in an ambulatory circuit versus transurethral bladder resection (TURB).

Material and Methods: Retrospective analysis of patients undergoing LF and TURB between December 2017 and January 2019. We evaluated the personal history, the characteristics of the tumor, the surgical procedure and the complications in the immediate postoperative period (hospital stay, catheterization, hematuria, acute urinary retention (AUR) and fever). Papillary tumors with a total size of less than or equal to 2 centimeters and no more than 8 lesions were included, all of them with prior TUR that confirmed low risk NMIBC. We took a biopsy during the LF. We measured the pain by the visual analogue scale (VAS) and the patient's satisfaction.

Results: We analyzed 52 patients who underwent TURB and 49 subjected to LF who fulfilled the inclusion criteria. 77% were male and 23% female. Both groups were comparable in age, comorbidity and anesthetic risk. Hematuria was present in 2% of those who underwent LF and 25% of those who underwent TURB (statistically significant difference, $p = 0.001$). No patient in the LF group manifested fever and 2% presented UAR, compared to 4% and 6% in TURB respectively (no significant difference). In the TURB group, 100% required catheterization and 100% were admitted for a median of 1 day (range 1-4). In the intervention, 25% presented complications such as the need for dilatation or previous urethrotomy. presented some complication. All differences were statistically significant ($p < 0.05$). The median VAS score after LF was 1 (0-5). 100% of those who had experienced both methods preferred a new LF if it was possible rather than TURB.

Conclusions: LF in an ambulatory circuit is safe and has a lower rate of haematuria and requirement for catheterization than TURB in our patients.

Thyroid Surgery: A Controversial Procedure for Ambulatory Surgery

Elisabet Julià Verdaguer; Emma Sánchez Sáez; Joan De La Cruz Verdun; Ana Ciscar Belles; Marina Vila Tura; Luís Hidalgo Grau; Xavier Suñol Sala

Introduction: Ambulatory surgery (AS) for thyroidal surgery is still controversial. It is accepted that, if AS was considered, it should be performed by experienced endocrine surgeons and in a Day Surgery Unit (DSU) that offers both quality and safety. In our DSU these surgical procedures are performed since 2008.

Objective: To evaluate the results of thyroid gland outpatient surgery in our hospital in the period 2008-2017.

Material and Methods: A retrospective analysis of a prospective database of all the patients submitted to thyroid surgery and proposed for outpatient surgery between January 2008 and December 2017. Selection criteria for DSU regime are: multinodular goiters with largest diameter under 50 mm, normal thyroidal function and solitary thyroidal nodes. Patients with thyroidal cancer and comorbidity that required hospital admission were excluded. Surgical techniques were isthmectomy (I), hemithyroidectomy (HT) and total bilateral thyroidectomy TBT). Moreover, the patients have to reside in a nearby area (<1h transfer) and with a caregiver for the first 48h. The study considers the substitution index, postoperative complications, early and late admissions and unplanned consultations.

Results: Five hundred and twenty four thyroid operations were performed, 180 of them in ambulatory regime (Substitution index of 34.4 %). Surgical techniques were 153 HT, 20 TBT and 7 I. There were no reoperations. Postoperative hypocalcaemia was not detected and 29 patients (16.1%) were early admitted, all them with minor complications. All the admitted patients were discharged in the first 24 postoperative hours.

Conclusions: Successful thyroid surgery can be done as outpatient in hands of experienced endocrine surgeons. However, a developed DSU with strict quality management criteria is required.

Feasibility of Ambulatory Surgery for Parathyroid Glands

Emma Sánchez Sáez; Elisabet Julià Verdaguer; Joan De La Cruz; Ana Ciscar Belles; Marina Vila Tura; Lluís Hidalgo Grau; Xavier Suñol Sala

Introduction: The Day Surgery Unit is a widely accepted and safe alternative to hospital admission for parathyroid surgery in selected patients, always following adequate protocols and clinic guides. Our Hospital has an experienced Integrated DSU, which performs a huge variety of surgical procedures with exhaustive and validated quality indicators.

Objective: To evaluate the results of parathyroid outpatient surgery in our hospital in the period 2014-2018.

Material and Methods: A retrospective analysis of a prospective database of all the patients submitted to parathyroid surgery and proposed for outpatient surgery between January 2014 and December 2018. Surgical operations we performed by the staff members of Endocrine Surgery Unit and General Surgery Residents.

A clinical guide with contrasted and validated parameters is required. We propose the outpatient surgery to all the patients undergoing to a parathyroid surgery which do not have associated comorbidity which preclude ambulatory surgery. The patients have to reside in a nearby area (<1h transfer) and with a caregiver for the first 48h. Indication for surgery was hyperparathyroisim and radioguided surgery is performed with the aim of intraoperative hyperfunctioning gland localization. The study considers the substitution index, postoperative complications, early and late admissions and unplanned consultations.

Results: Forty-nine parathyroid excisions were performed, twenty-six of them in the DSU (Substitution index of 53%). There were no immediate postoperative complications, but 2 cases of dysphonia were solved at 3 and 6 months with conservative treatment. There was one early admission surgery due to nausea (3.8%). There were no unplanned consultations nor late admissions.

Conclusions: DSU parathyroid surgery in a valid alternative to hospital admission in hands of experienced endocrine surgeons. A developed DSU with strict quality management criteria is required.

Rectal Mucosal Prolapse: Apex Technique Results

Ana Ribeiro; Sílvia Silva; Inês Romero; Susana Costa; Álvaro Gonçalves; Manuel Oliveira
Tâmega and Sousa Hospitalar Center

Introduction: Rectal mucosal prolapse is a frequent condition, particularly in women, which may affect patients' quality life with symptoms related to obstructed defecation, as sensation of incomplete evacuation, pain and, rarely, bleeding. When surgery is indicated, the use of staplers to correct intussusception is common. The Apex Technique, described by Prof. Regadas, is a simple and minimally invasive technique, with low costs and promising results. The aim of the study is to evaluate the surgical outcomes in patients with rectal mucosal prolapse submitted to Apex Technique.

Materials and Methods: Retrospective review of patients treated with Apex Technique for rectal mucosal prolapse, undergoing outpatient surgery, was performed from 1 January 2017 to 31 December 2018. Apex Technique was performed under regional anaesthesia with a single stapler (HEM/EEA 33). The variables studied were patients' gender and age, symptoms associated (pain, bleeding, obstructed defecation) and surgical outcomes as resolution of symptoms and postoperative complications.

Results: Thirteen patients with rectal mucosal prolapse were included. The median age was 48.4 years old, and 77% of the group were women. Almost half of the patients (46%) presented with an associated hemorrhoidal prolapse. The most common symptom reported was bleeding (46%), followed by obstructed defecation (39%) and pain (15%). The median operative time was 42 minutes. There were no perioperative complications. Regarding medium-term postoperative complications, two patients had minimal self-limited bleeding and three patients reported postoperative pain but only one required analgesic medication. A small prolapse was identified, 4 months after surgery, in one patient (8%), which is waiting for a new one to correct it. Most of our patients (92%) presented with total resolution of symptoms after submission to this technique. There were no mortality cases. The median follow-up time was 5.8 months.

Conclusion: Apex Technique seems to be a safe and quickly performed surgery for the treatment of rectal mucosal prolapse. Our findings are similar to other studies, as most of our patients showed resolution of rectal intussusception, with improved quality of life. Not only is this technique associated with optimal results given its ability to remove large amounts of tissue, but it is also associated with a good cost-benefit, since it uses only one stapler and is possible to be performed in an outpatient setting.

Overnight Stay Endocrine Neck Surgery: A Four-Year Casuistic Analysis in a Portugese Hospital.

Maria Carp; Catarina Rodrigues E Silva; Maria Teresa Monteiro

Background: Neck surgery complications can be catastrophic and were historically performed as inpatient procedure. However thyroid and parathyroid ambulatory surgery has become more common in the past decade to reduce hospital inherent complications and economic costs.

Materials and Methods: This retrospective cross-sectional study analyzed all cases of endocrine surgeries in adult patients between 2014 and 2018 registered on a database of a Portuguese Ambulatory Unit Care. Any revisit to the hospital or emergency department within 30 days related to the intervention was identified.

Results: A total of 1566 patients were included: 84% were female gender. The mean age was 54.9 years. 13.5% of the patients were ASA classification I, 80% ASA II and 6.5% ASA III.

The most frequent diagnosis was multinodular goiter in 49.7%, papillary thyroid carcinoma (11.7%) and follicular thyroid cancer (8.7%). Regarding parathyroid disease, 4.2% of the patients had primary hyperparathyroidism.

The most prevalent surgery was total thyroidectomy in 82.2% (4.2% as a secondary approach for recurrent thyroid disease, 2.2% associated with cervical lymphadenectomy). Partial thyroidectomy was done in 31.9% and parathyroidectomies in 26%.

The surgeries average time was 70 minutes. Primary Recovery mean time permanence was 2h48min and Secondary Recovery 22h13min.

The complications rate was 3%: 14 patients had wound hematomas requiring immediate surgical reintervention before discharge, 12 cases of symptomatic hypocalcaemia (3 of them become permanent), 8 cases of cervical edema conservatively managed, 10 casesA of stridor (8 bilateral transient recurrent nerve palsy and 2 permanent) and 2 cases of wound infection. 30-day mortality was zero.

Conclusion: As this study was based on a database search, it is likely that complications were underreported. The most feared complication of these surgical procedures are wound hematomas compromising airway patency, most common in the first 24 postoperative hours. However, in this facility with overnight stay, they are readily identified and managed as a surgeon and an anesthesiologist are permanently available for emergencies.

It is reasonable to conclude complications rate was low. So endocrine neck surgery can be safely performed in this Ambulatory Unit Care because adequate pre-operative optimization is ensured, the procedure is done by an experienced operating team and under proper logistics.

Outpatient Arthroplasty In a Surgicenter: Lessons and Experience

Sivasenthil Arumugam[1,2]; Diane Heelan[2]; Joe Santos[2]; Nicole Kluglein[2]

[1.] Woodland Anesthesiology Associates, Hartford, CT, USA; [2.] Western Connecticut Orthopedic Surgical Center, Danbury, CT, USA

Outpatient arthroplasty has been made possible by innovative clinical pathways that include improved surgical and anesthetic/analgesic techniques. Improved patient outcomes, satisfaction and decrease in healthcare costs have all lead to its popularity. Arthroplasty presents unique challenges in an ambulatory setup, leaving no room for error. We share our experience with outpatient arthroplasty program at a freestanding surgicenter.

Patient selection and education are two major factors that impact the success of outpatient arthroplasty program. At present there is lack of strong evidence for selection criteria. Most available criteria are based on expert opinion and current practices. We developed exclusion guidelines applicable to our patient population based on available literature. It includes age, BMI, medical issues, dependence or addiction and complexity of arthropasty.

Patient education prepares the patient and family for all the steps and expectations for a smooth and successful outcome. It includes medical evaluation, home visit & evaluation by a visiting nurse, physical therapy consult and a tour of the surgicenter. This has helped in excluding some patients.

In spite of the guidelines, cancellation of patients after review included reasons such as solitary kidney, anticoagulant therapy, urological, neurological and psychosocial problems. Other causes for cancellation were insurance denials, unsafe home environment and patients opting out.

Spinal is our choice of anesthesia for both hip and knee arthroplasties. Effective multimodal analgesia is an essential component for same day discharge, especially in knee arthroplasty patients. Our regimen for this group includes a preop Ultrasound guided local anesthetic infiltration of knee, including IPACK technique.

One patient had asystolic cardiac arrest at the end of surgery, successfully resuscitated, transferred to a hospital and discharged without any complications.

Successful outpatient arthroplasty programs need customized criteria based on evidence and patient safety as their top priority. Effective communication and co-ordination between surgical, anesthetic, nursing and administrative teams is also essential.

References.

1. Kort NP et al, Patient selection criteria for outpatient joint arthroplasty, KSSTA 2017;25:2668-75
2. Krause A et al, Outpatient Total Knee Arthropasty: Are we There Yet? (Part 1), *Orthop Clin N Am* (2018);49: 1–6

The Application Effect of a WeChat-Based Patient Education Model On Ophthalmologic Ambulatory Surgery Patients

Shuxian Liu

Beijing Tongren Hospital, Capital Medical University

Introduction: To explore the application and effect evaluation of WeCol-based patient education in ophthalmic outpatient surgery patients for day surgery Provide support to improve their self-care ability and gain extensive expertise.

Material and Methods: A total of 200 patients who underwent day surgery in our hospital were enrolled. Based on previous (100 cases) and (100 cases) implementation based WeChat's health education divided them into a control group and an intervention group. Both groups received intervention in routine day surgery health education. The intervention group received additional WeChat-based health education. The questionnaire was used to study preoperative, postoperative and 1 day, 1 week after discharge, 1 month and 3 months of the two groups of patients. This article compares the health knowledge and self-care ability scores of the two groups.

Results: The health knowledge and self-care ability of the patients were better than the control group, and the difference was statistically significant ($P < 0.05$).

Conclusion: WeChat-based health education model significantly improves the professional knowledge and self-care ability of patients with different stages of day surgery. It shows that making full use of new network tools can make patients more willing to accept and more easily grasp medical-related expertise. Special Industry knowledge can effectively improve the patient's self-care ability, and play a positive role in improving the service level and service quality of nursing staff.

Analysis of the Causes and Nursing Countermeasures of The Patients' Unplanned Return To Hospital After Ophthalmic Day Surgery

Wanxia Zhang
Beijing Tongren Hospital, Capital Medical University

Introduction: To explore the causes and preventive measures of the patients' unplanned return to hospital after ophthalmologic day surgery.

Materials & Methods: Through face-to-face interviews with the unplanned returning patients after ophthalmologic day surgery, the basic information of patients and reasons for their return were obtained. The data were collected from January to June 2018 in ophthalmology ambulatory surgery center of our hospital.

Results: Of a total of 13447 patients who underwent day surgery, 110 (0.82%) patients unplanned returned to hospital within 24 hours after discharge. Main causes: 55.5% surgical incision pain, 34.5% high intraocular pressure, 0.9% corneal epithelial exfoliation. The treatment methods included: anterior chamber puncture (21 cases), only condition observation (66 cases), medical treatment (18 cases), other specialist outpatient visits (5 cases).

Conclusion: High intraocular pressure and surgical incision pain are the main reasons for unplanned return to hospital within 24 hours after ophthalmic day surgery. The health education for postoperative discomfort and psychological nursing work should be strengthened. To teach patients the main symptoms of returning to hospital after surgery, and early detection of complications, can effectively ensure the postoperative safety of ophthalmic day surgery patients.

Clinical Risk Management in Day Surgery: Which Role?

Annalisa Corrado[1,2]; Adriana Mazzocchetti[1]; Anna D'aloisio1; Massimo Basti[1]; Enzo Monteferrante[1,2]
[1] AUSL Pescara; [2] Italian Society of Ambulatory Surgery and Day Surgery (SICADS)

The Day Surgery (DS) is exposed to possible errors due to the peculiarity of providing care in a short time and with a short stay.

In Clinical risk management, it is essential to promptly identify adverse events / near miss and remodulate the pathways by increasing the levels of defence in the Operating Room (OR) and on the ward. In the OR, adverse events were tackled by using the reactive method. Training courses have been set up for staff on clinical risk management to develop the ability of identifying errors with the correct reporting method and the management of them to make the system safe, underlining the importance of using errors reporting systems and a constructive attitude towards events.

In the ward, was used the proactive method: HFMEA analysis. The selected highlights are the following:

1 visit of the surgeon before the discharge and delivery of the documentation;
2 analgesic prescription;
3 information to the family doctor;
4 appointment for outpatient check-up within a week.

In the OR, in 2017, there were 4 voluntary reporting cards of 979 operated patients: 3 for near miss and 1 for adverse event; 3 briefings for patient safety before operative sessions and related debriefings; 1 case of an operating session not completed. In 2018 there were 10 voluntary reporting cards for near miss, 0 for adverse events; 4 operating sessions not completed.

In the inpatient ward, in 2017, 785 out of 979 hospitalized patients were evaluated. The surveys were: parameter 1 was performed on 785 (100%), 2 on 655 (83%), 3 on 423 (53%) and 4 on 715 (91%). In 2018, 877 out of 966 hospitalized patients were evaluated: pamater 1 on 877 (100%), 2 on 653 (74%), 3 on 502 (57%), 4 on 815 (92%). There was serious under-reporting of incidents before the observation period. Training and standardization of the operating procedures dedicated to the DS, encourage the implementation of corrective actions that make the system safer.

Daycase Laparoscopic Fundoplication for Gastro-Esophageal Reflux Disease – Our Initial Experience

José Pinto; Bruno Barbosa; Raquel Pereira; Júlio Marques; Mercedes Bello; Maria João Diogo; Carlos Casimiro

Serviço de Cirurgia do Centro Hospitalar Tondela-Viseu

Introduction: The purpose of this study is to assess the feasibility and safety of day-case laparoscopic fundoplication for gastro-esophageal reflux disease (GERD).

Materials & Methods: This retrospective study refers to our initial experience of 6 months of day-case laparoscopic fundoplication for symptomatic GERD. The eligibility criteria were: ASA score 1 or 2, the absence of a large hiatal hernia, the existence of home support and living 1 hour drive from hospital. Evaluated outcomes included admission to conventional hospital facilities, unplanned readmission, complications, re-operation rates and post-operative symptoms.

Results: A total of 8 patients were included in the study. There were 3 men and 5 women of median age 47 (range 23-61) years. The median BMI was 24.61 Kg/m2. All patients had small hiatal hernias. A Nissen fundoplication was performed in 7 patients and a Toupet fundoplication was performed in 1 patient due to abnormal manometry. The median operating time was 94 (range 75-115) min. A laparoscopic inguinal hernia repair (TAPP) was additionally performed in 1 patient. There were no conversions to open surgery. 8 patients were discharged within 23 hours of admission, 6 of them on the day of the surgery (2 patients had overnight hospitalization because of dizziness). There were no post-operative complications or readmissions. 2 patients complained about bloating and flatulence in the follow-up consultation.

Conclusion: Despite our little experience, this study suggests that day-case laparoscopic fundoplication seems to be safe and feasible when performed by experienced surgeons in very well selected patients.

Prolonged Cardiac Arrest After Low Dose Intranasal Injection of Lidocaine with Epinephrine

Dr Frank Weber

Case report: A 22-y,ASA 1,55kg woman due to cosmetic rhinoplasty. The patient had no medical history, no allergies, and took no medications. General anesthesia was induced uneventfully with TCI remifentanil + propofol, intubated with 7.0mm ETT +ventilated, 35% oxygen. The patient was hemodynamically stable when the surgeon injected 6ml of 2% (120mg) lidocaine with 15micgr./ml epinephrine into the submucosa of the distal and middle parts of the posterior nasal cavity. 20 sec. after the injection of l.a., the patient developed tachycardia and hypertension with a heart rate of 180 beats/min+ blood pressure of 180/120mmHg. Seconds later, the oxygen saturation measured by puls oximetry tracing and noninvasive blood pressure measurements were lost with no palpable carotid or femoral pulses. The patient appeared ashen and in a state of PEA. ACLS was initiated with chest compressions, a defibrillator applied to the chest confirmed PEA with a narrow complex tachycardia. During 1-10min the patient received epinephrine 1mg iv 2x+ amiodarone 300mg iv. An arterial femoral line was established + chest compressions maintained. 2 min later, the ECG showed VT, but, 200J cardioversion failed, PEA mantained +1mg epinephrine iv was given. After 17minACLS, PEA remained, LAST was considered +150ml iv bolus of 20% lipid emulsion was given+100ml for mantainance. Over the next 4 min hemodynamic improvement, syst 90mmHg. ROSC occurred 26 min after the initial cardiac arrest, patient was extubated 4 min later. ABS: pH 7.17, BE deficit 12.7+ lactate 7.1mg/dl. BE, pH+ lactate normalized after 1 day. ECG showed left ventricular dysfunction, cardio sonography visualized hypokinestesia apical, both parameters recovered in the following days and were normal after day 4. Due to pulmonary edema, CPAP treatment for 2 days. The patient was discharged from the hospital after 4 days without any neurologic or other sequelae and resumed normal life. The unique aspect of this case is the relatively low dose of lidocaine leading to cardiovascular collapse. Only 2,2mg/kg lidocaine + 90micgr. Epinephrine (total) was given intra nasal, which is far below the recommended max-dose of 7mg/kg (with epinephrine). Knowledge about LAST management with lipid emulsion can be lifesaving. This case was published 01/2019 in cases-anesthesia-analgesia.org:"Prolonged pulsless electrical activity cardiac arrest after intanasal injection of lidocaine with epinephrine" in cooperation with Prof. G. Weinberger et.al, Univ Hosp Chicago.

2018 – A Peculiar Year

Cândida Infante; Ana Luísa Vieira; Sérgio Santos; Tiago Hipólito; Pedro Pratas; Daniel Vieira; Cláudia Carreira;Franscico Matos

Coimbra University and Hospital Center - Anesthesiology Department

Introduction: The year 2018 was marked by major consternation in the Portuguese healthsector, with great socio-economic impact. Between 22/11/2018 and 31/12/2018, a strikewas carried out by nurses, directed specifically at the activity of the surgical blocks. Five hospitals was chosen at national level to join the strike. During this period the surgical activity was reduced to the legally determined minimum services (only urgent/emergent surgeries and oncological surgeries). This study intends to characterize the impact of this strike on the surgical activity at the Ambulatory Surgery Unit of one of the hospitals chosen for the strike.

Material & Methods: Retrospective study including the data pertaining to the surgical schedules, effective interventions and surgical cancellations at the Ambulatory Surgery Unit(UCA) on the period from 2015 to 2018.

Results: In 2018, 6509 surgeries were scheduled, of which 5030 were performed (77.4%)and 1470 were canceled (22.6%). Comparing with previous years, from 2015 to 2017, there was a 9.7% increase in scheduled surgeries. This increase was not accompanied by an increase in performed surgeries. In fact, this index has been decreasing over the years 2018 was the year in which a greater number of scheduled surgeries were canceled (1470).

By performing the monthly analysis (chart 1) for the year 2017 and 2018, it is possible to observe periods of activity decrease: on the month of August and December (vacation periods). Additionally, in 2018, we can observe a period related to the surgical strike (November and December) in which there is an increase on the surgical cancellation rate(41.2% in November and 74% in December), which amounts to a total of 539 surgeries cancelled.

Conclusion: With the creation of additional surgical schedules at the UCA in 2018, it was expected that there would be a gradual and significant increase in the number of outpatientsurgeries, allowing for an adequate response to the increasing needs of the National Health Service. This was not observed due to the impact of the surgical strike that led to the cancellation of more than 40% of the surgeries scheduled for the months of November and December. This was one of the factors conditioning the growth of the surgical activity at the UCA.

Perioperative Humanization Project: Personal Identification of Health Professionals -ID @ ORPROFESSIONALS

Susana Rute Ferreira Gregório Camarinha[1]; Ana Catarina Gonçalves Silva[2]; André Garcia Luz[3]; Márcia Meira[1]; Gabriela Bazan1; Márcia Cardoso[1]; Valdemar Santos[1]; Amélia Monteiro[4]

[1] Hospital-School Fernando Pessoa University; [2] HE-UFP; [3] Sto António Hospital; [4] University Fernando Pessoa

Introduction: The personal identification of health professionals is an important component of in contact with the patient. In the operative block, patients submitted to surgery present high levels of anxiety. The personal identification of health professionals in the allows the patient / professional therapeutic relationship to be enhanced, so that the patients feel comfortable to express their needs and concerns.

Objectives: This study is part of the Perioperative Humanization project developed by the nurses of the Operational Block of the Fernando University School Hospital Person. The main objective is to optimize the personal identification of health professionals, for professional categories, in order to facilitate the therapeutic relationship between patient / surgical team and to increase users' confidence in the health care they provide surgical context.

Methods: A questionnaire was carried out on 50 patients that showed a lack of identification professionals were identified by professional category (color-coded) and name of the employee, in the uniform and surgical cap. An evaluation questionnaire was satisfaction of the personal identification of health professionals in the Operative Block to 262 patients, after surgical intervention, by telephone. Questionnaire adapted from the Visible Name Badge Evaluation and applied to the Hamilton scale.

Results: 98% (256) of the patients reported that professionals should use identification; 97% (154) of the patients reported that the team performed; 67% (196) indicated that they have identification of professionals; 80% (210) of the patients reported that the color code facilitated the rapid identification of professionals; 70% (166) stated that they preferred lateral location in the uniform; of the 30% (96) who preferred the location on the surgical cap, reported that when they are lying on the couch, this identification is more visible. Valued the content, the format and the location of the identification and the anxiety impact.

Conclusion: This study stresses the importance of the identification of health professionals at the name and by professional category. A relation between the reduction of anxiety and the identification of health professionals in a surgical environment.

Ambulatory Breast Cancer Surgery Program

Emma Sánchez Sáez; Elisabet Julià Verdaguer; Ariadna Danés Barris; Neus Ruiz Edo; Sara Llorca Cardeñosa; Cristina Serra; Lluis Hidalgo Grau; Xavier Suñol Sala
Hospital de Mataró

Introduction: Over the last decades the breast cancer surgical treatment has evolved to less aggressive surgeries being suitable for outpatient surgery. For this reason, in 2009 our Hospital set an ambulatory surgery program for this pathology.

Objective: Study the results since the full implementation of the major ambulatory surgery program for breast cancer in our center.

Material and Methods: A retrospective analysis of a prospective database of all the patients submitted to breast cancer surgery proposed for outpatient surgery between January 20012 and December 2018.

The aim of this study is to evaluate all the patients treated in the ambulatory program, the surgical procedure performed, the evolution of the substitution index along the years, the tax and causes of conversion from outpatient to inpatient surgery.

Results: In the period of 2012-2018 a total of 868 breast cancer surgeries were performed, 406 of them in non-admittance surgical regime. The substitution index was 46.7%, reaching its maximum in 2015 (56.8%).

The conversion tax was 12.8% (52 patients), being the axillary lymphadenectomy for positivity in the sentinel ganglion (41 patients) and the medical or anesthetic postoperative complications (11 patients) the principal causes. In 2017 we started PRESA protocol, which supposes a reduction of conversion tax (due to differed analysis of the sentinel node in selected cases).

In the group of outpatient surgery, from 2015 to 2018, there are 20 consultations to the emergency room and 5 re-admissions due to surgery complications being hematoma and wound infection the principal causes.

Conclusions: Breast cancer surgery in outpatient regime has satisfactory results and it is a safe technique in our center. The index substitution has increased along the years since the implantation of the outpatient program.

Where Does Ambulatory Surgery Stand in the Last 5 Years?

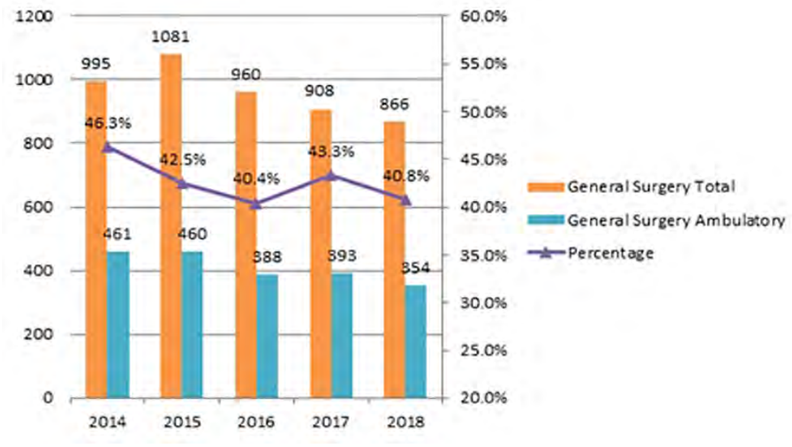
Joana Pimenta; Filipa Rocha; Valter Paixão; Raluca Saramet; Alexandra Costa; Gabriel Gomes; Emília Duro; Luis Gabriel; Fátima Caratão
Unidade Local de Saúde do Baixo Alentejo, Beja

Introduction: The first totally independent ambulatory surgery center ("Surgicenter") was inaugurated in February 1970 in Phoenix, Arizona. The Portuguese Association of Ambulatory Surgery [Associação Portuguesa de Cirurgia de Ambulatório (APCA)] was created in September 1998. On the 13th January of 2003 our hospital founded the Ambulatory Surgery Department. It functions from 8am to 8pm and it uses the Central Operating Theatre. The specialities that operate there include: general surgery, urology, gynaecology, orthopaedics, ophthalmology and otorhinolaryngology.

The authors have revised the ambulatorial surgery numbers regarding general surgery patients in the last 5 years.

Methods: A retrospective analysis of the data on the day surgery cases was undertaking, between January 2014 and December 2018.

Results: In the last 5 years, our Ambulatory Surgery Department undertook a total of 11675 surgeries, of which the majority were from Ophthalmology (7104); and 2056 belonged to General Surgery which accounts for about 1/6. As we see on the graph, the number of ambulatorial surgeries has followed a descending tendency. However, the total number of surgical procedures has followed the same pattern.



Conclusion: Unfortunately, our percentage of ambulatorial general surgery has been on a downfall; despite the decreasing total number, we had hoped the relative number had increased. We offer possible explanations for this. Firstly, in our region desertification is a reality, with less inhabitants. Secondly, our district's population is an aged one. According to Kent et al1, although patient age is increasing, it does not seem to affect ambulatorial numbers, however comorbidities associated with older age must be considered. Thirdly, social and geographical factors like distance to the Hospital and responsible adult supervision during the first 24h can be a difficult endeavour.

Surgical Treatment of Fractures in an Outpatient Surgery Center: Our Experience

Diogo Chorão Constantino; Vicente Campos; Marino Machado; João Pedro Jorge; Ana Ferrão; Joana Correia; Rui Gonçalves; Frederico Teixeira

Hospital Curry Cabral

Introduction: Orthopaedics and Traumatology has been trending towards ambulatory surgery. Currently, the percentage of outpatient surgery is a benchmarking criteria for portuguese hospitals performance as regulated by the Healthcare system central administration. In spite of day surgery being classically concerned with management of the elective patient, there is no reason why the same principles cannot be applied to individuals in need of nonelective treatment. Thus, our department has been exploring the possibility of performing planned emergency day surgery, involving musculo-skeletal trauma – namely fractures. By optimizing our operational framework we managed to create a referral protocol for patients from the emergency department to our outpatient surgical center. This would provide these patients with appropriate treatment, in a controlled, daytime context, performed by a speciallized team, without major delay that would worsen these patients' outcome.

Materials and Methods: The authors describe and analyze the results of the employment of our referral protocol, by reviewing the cases of musculo-skeletal trauma - 37 fractures - treated in our outpatient center during the first year of its implementation. We performed a descriptive demographic analysis of the 33 patients included in this cohort, as well as their comorbidities, body mass índex, ASA score, post-operative complications and need of transfer to inpatient facilities.

Results and Discussion: 15 distal radius fractures, 7 scaphoids, 4 hand phallaxes, 2 ulnar diaphyseal, 2 scapholunate dissociations, 2 metacarpal fractures, 1 metatarsal, 1 olecranon, 1 triquetrum, 1 Maisonneuve fracture, and 1 medial malleolus were treated in our outpatient surgery department. Average patient age was 42 years old (SD 16.4), with a 2:1 male-female ratio. 14 patients had no major comorbidities. The average BMI was 25.68, with 10 patients being above 25kg/m2. 88% of the patients were ASA II, 9% were ASA I, and 3% were ASA III. We didn't register any complications, and no patients needed transfer to inpatient facilites after treatment.

Conclusion: With this analysis we observed that by following a strict selection protocol, it is possible to perform surgical treatment of fractures in an outpatient facility, with low complication rate, preserving the efficiency, and lowering direct costs of treatment.

Development of Ambulatory Surgery in Serbia

Jelena Petrovic Sun[1]; Marinko Zuvela[1]; Gluhovic Aleksandar[2]; Ninoslav Ribic[3]

[1] University Clinic for Digestive Surgery, 1st Surgical Clinic, Clinical Center of Serbia; [2] Clinical Center of Vojvodina; [3] 011 Medical Team, Belgrade

In Serbia, ambulatory surgery has not yet been recognized by the National Healthcare System, but has been widely accepted in private practice. The benefits of the ambulatory approach are numerous and the private institutions have found their ways to incorporate it in their own organization. Unfortunately, mostly the patients with private insurance or higher incomes can feel the advantages of the ambulatory treatment, since our healthcare system only counts occupied beds, so our effort stayes unnoticed.

Our healthcare reform relies on the realization of DRG (diagnostically related groups) system. Application of this system will offer us the possibility to organize ambulatory surgical services, but so far we came only to the second step of seven in the process of implementation. The pilot study was conducted on 8 hospitals in Serbia, and the results are promising.

Therefore, we have to wait for the full implementation of this reform. In the meantime Serbian Association for Ambulatory Surgery (SAAS) is working on its inclusion on decision making and professional counseling.

SAAS was founded in 2013, and since than we had organized several workshops, seminars and public conferences on this topic. At this moment we are happy to have a growing number of members of all surgical specialties and an increasing interest of the public. We have started working on the National Guide of Good Practice in Ambulatory Surgery and are expecting its promotion in several months. Apart from that, the new Healthcare Law is about to be adopted and our Association has offered its expertise in certain fields that concern ambulatory surgical treatments. We are supported by Surgical Section of the Serbian Medical Society, Serbian Medical Chamber and Medical Chamber for Private Practice.

This is the first time in the history of our country that the doctors of similar, but still different specialties are united to influence the system, give their professional opinion about the clinical pathways and the benefits both for the system and the patients. We believe that we are on a good track to make positive changes on our healthcare model.

24-Hour Call Guide For Post-Operative Telephonic Nursing Appointment, Utopia or Quality Increase?

José Nunes[1]; Maria Baptista[2]

[1] Cândido Benedito Lopes; [2] Isabel Jesus Diniz

The 24-Hour Post-operative Telephonic Appointment is one of the links in the health care chain of Ambulatory Surgery. Continuity of care afterdischarge is of great importance for the success of the entire Ambulatory Surgery process, as well as for patient/Caregiver satisfaction.

The implementation of the Nursing Telephonic Appointment requires a knowledge of the communicational process at a distance, focused on the nurse-patient-caregiver relationship.

The technical aspects of non-face-to-face communication, as well as the circumstances, limitations and constraints of the technology used, require the acquisition of skills and the development of skills in this area of care and relationship.

The quality of the care provided and the safety of it depends on the transformation of an empirically communicated communication into a technically efficient and effective communication.

This presentation is based on an experience of 4689 telephone contacts made in 2017 and 7081 contacts made in 2018. The assessment of the patient's health status was performed through indicators such as nausea, vomiting, pain, hemorrhage or other surgical complications in the period. The bibliographic review was carried out in papers and published documents, extrapolating from similar contexts and adapting them to the reality of our Ambulatory Surgery department.

The purpose of this bibliographic review was to know the implications of the Nursing Appointment in the continuity of care, its advantages and disadvantages, the risks inherent in non-face-to-face communication, patient/caregiver conditions that interfere in communication, relationship of trust and sharing of information with physicians and development of the therapeutic process of the nurse-patient-caregiver relationship.

As a result of this review, we prepared a Technical Protocol on the 24 hours of postoperative Nursing Telephonic Appointment of and a guide to help the communication with the Patient-Caregiver.

This bibliografic review, allowed us to better understand the nonpresence communication process, technical needs, as well as environmental conditions, highlighting the importance of the nursepatient-caregiver relationship. With the aim of a less empirical approach consolidated in a paradigm of fairness with uniform language and adapted to the context and transversal to all the professionals involved.

Outpatient Surgery in the Elderly Over 75 Years Old

Patrícia Araújo Silva; Ana Maria Pereira; Teresa Carneiro; Conceição Antunes

Hospital de Braga

Increased age predisposes to significant hemodynamic changes during surgery, which may be more severe in extremeages. Elderly patients seem to benefit from outpatient surgery, due to the lower cognitive dysfunction that this type ofsurgery presents in the postoperative period. However, the results described in the literature regarding the influence of age on outpatient surgery are inconsistent.

Although outpatient surgery is rarely performed in this age group, this procedure is a common practice in our hospital, and the surgical approach is assessed individually, with a strategy based on quality and safety.

Observational, retrospective and descriptive study of surgeries performed at the General Surgery Service of our hospital, during the year 2018, in patients aged 75 years or over, consulting surgical reports, discharge notes and subsequent consultations.

During the year 2018, 68 surgeries were programmed on an outpatient basis at the General Surgery Service, in patients aged 75 years or over.

Of these surgeries, 30 procedures were excluded because they were placements / extractions of central venous catheters. The procedures considered for the study included corrections of inguinal, umbilical and incisional hernias, laparoscopic cholecystectomies, excision of skin lesions and subcutaneous cellular tissue and benign proctology.

Patients, mostly males, had a median age of 80 years (74 to 93), with 6 patients over 85 years of age. With regard to comorbidities, 78.6% of the patients had arterial hypertension, 64.3% dyslipidemia, 28.5% urinary tract diseases, 35.7% osteoarticular disease, 46.4% type 2 diabetes mellitus, 17.86% heart disease, 17.86% respiratory disease, 7.14% obesity, 3.57% psychiatric disease and 3.57% neurological disease. There were no complications reported associated with the procedures performed or the need for hospitalization after surgery.

In the scope of General Surgery, outpatient surgery in patients aged 75 and over have been performed with the same quality and safety, with little change in their daily life and maintaining the usual family support, thus making it a viable and safe option for this age group.

Ambulatory Surgery for Hand and Wrist Trauma: Analysis at a Level One Trauma Center

Miguel Relvas Silva; Bernardo Nunes; José Cunha Fernandes; Vitor Vidinha; António Sousa; Pedro Negrão

Departamento de Ortopedia e Traumatologia, Centro Hospitalar Universitário de São João

Introduction: Hand and wrist traumatic lesions (HWTL) are one of the most common injuries. They represent a public health problem, with heavy economic burden, due to its high incidence among active population. Ambulatory surgery aims at optimizing resources, while providing great quality of care. The aim of the study was to describe and compare the outcomes of patients who underwent surgical procedures in ambulatory/outpatient care (OC) and inpatient care (IC).

Materials and Methods: A retrospective review of patients submitted to OC surgical treatment of HWTL, between January and September 2018, in a level one trauma center, was performed. The inclusion criteria included the following: an age between 18 and 75 years, ASA Physical Status Classification System I/II, bony and/or ligamentous HWTL, follow-up after surgery of more than 1 month. Patients were excluded if they had concomitant lesions, open fractures or medical conditions that precluded an OC. Data was recorded as follows: demographic information, lesion, time to surgery, procedure, visual analog pain scale (VAS) at discharge and 24 hours post-operative, infection rate and need to reoperate at 30 days. In the OC group, patient's satisfaction was evaluated at 30 days as well as likelihood of recommending OC. In the IC group, length of stay and cost were estimated. All data were analyzed using SPSS version 25.

Results: The demographic data were not statistically significantly different ($p>0.05$). Median time to surgery was 6 days [0-22] in the OC group, while in the IC was 2.5 days [0-7] ($p=0.007$). Regarding post-operative pain, VAS at discharge was significantly lower in the OC [median 0 vs 1.5] ($p=0.001$). However, no statistically significant difference was found at 24 hours post-operative ($p=0.141$). There was no need to reoperate at 30 days. In the OC, all patients reported "very satisfied" and would recommend ambulatory surgery. IC mean duration of stay was 4 days [1-15], with a mean estimated cost of 1500€/patient. Only a case of infection was detected (in the IC).

Conclusion: Although the time to surgery was significantly lower in the IC, OC group revealed better pain control and great patient's satisfaction. These findings heighten the role of ambulatory surgery in traumatic lesions, despite having a small and non-randomized sample. The treatment of HWTL in ambulatory setting revealed a safe option, with high reported patient's satisfaction and a potential cost reduction.

Effect Of Two Anesthetic Techniques in Nausea and Postoperative Vomiting in Children. The Experience in Outpatient Care Surgery.

Valeria Epule[1,2,3]; Sofía Yevenes[1,2,3]; Manuel Vial[1,2,3,4]; Luis Bustos[4,5]; Virginia Ortiz[3,6]; Carolina Nova[3,6]; Paulina Urrutia[3,6]; Daniela Chaura[3,6]

[1] Surgery, Traumatology and Anesthesiology department; [2] De La Frontera University; [3] Dr. Hernán Herníquez Aravena Hospital; [4] Public Health department; [5] CIGES Excelence Center, Medicine Faculty; [6] Outpatient care surgery unit

Introduction: Postoperative nausea and vomiting (PONV) are a frequent complication in children, twice as often as in adults (incidence of 13-42%). It is one of the main complaints of the parents, cause of hospital admission and re-entry. Associated factors are age, history of PONV, type of surgery, technique and duration of anesthesia.

Purpose of the Study: To compare the incidence of PONV of inhalational anesthesia (AI) versus total intravenous anesthesia (TIVA) in a pediatric population cohort in an outpatient care surgery.

Material and Methods: Patients under 18 years of age intervened in the outpatient care surgery unit, between August 2011 and September 2015. Descriptive and analytical statistics of biodemographic and clinical variables are performed. Data were analyzed in statistical program SPSS version 20.

Results: During the period studied, a total of 2288 patients were operated. A total of 68.6% of the patients were men, with an average age of 7.8 ± 3.93 (between 1.3 months and 18 years) and a BMI of 18.3 ± 3.81. The distribution by ASA was 85.0%, 14.7% and 0.3% (ASA 1, 2 and 3, respectively). The most frequent specialties were Pediatric Surgery 46.5%, Otorhinolaryngology (ENT) 28.7% and Child Traumatology 15.6%. 66.9% received TIVA. 8.1% had PONV, being more frequent in the group that received AI (17.4% vs. 3.5%, RR = 4.97), a difference that was statistically significant ($p <0.001$). In the analysis by subgroups, those patients operated on for ENT pathology had more PONV than the rest of the patients (18.1%, $p <0.001$). In the group of ENT patients, the use of TIVA protected the patients from presenting PONV (26.6% vs. 11.3%, RR = 2.35), a difference that was statistically significant ($p <0.001$). In turn, girls had more PONV (10.7% vs. 6.9%), a difference that was statistically significant ($p = 0.003$). Passive smoking was not a protective factor for PONV. When analyzing the behavior by age, there is a change in incidence after three years, an effect that is more accentuated in the group that received AI. The incidence of PONV increases by an average of 1.8% per year up to 8 years, and then decreases by 0.9% per year up to 18 years. No relation was found with the operative time.

Conclusions: Children present more PONV when using AI, compared with TIVA, especially in risk groups such as ENT surgery. In pediatric patients, the use of TIVA should be privileged, especially in risk groups for PONV.

Drug Induced Sleep Endoscopy (DISE) – An Ambulatory Procedure We Should Know About

Maria Inês Saldanha[1,2]; Mafalda Sousa[1,2]; Fernando Vales[1,2]; Vitor Cardoso[1,2]; Margarida Santos[1]

[1] Dept. of Otorhinolaryngology, S. João Hospital Medical Center, EPE, Porto, Portugal; [2] Unit of Otorhinolaryngology, Dept. of Surgery & Physiology, University of Porto Faculty of Medicine, Porto, Portugal

Introduction: Drug-induced Sleep Endoscopy (DISE) is nowadays the most widespread diagnostic tool for endoscopic evaluation of upper airway sleep disorders as snoring and obstructive sleep apnea hypopnea syndrome (OSAHS). It is commonly performed as a day-case, except for cases of concurrent surgery or severe patient's associated conditions. This diagnostic technique requires a safe clinical setting with standard anaesthetic equipment. The European position paper on DISE (2018 update) revises the most significant literature to present an insight into several aspects of DISE, such as indications, sedation preferences and standardization of findings. Nevertheless, there is still space for research into DISE. To achieve the best protocol of sedation or a thorough method of calculating DISE cost-effectiveness are two examples. It is our responsibility to use this technique wisely, in the correct patients, in the correct setting.

Materials and Methods: The present paper revises the patients submitted to DISE in a tertiary hospital otorhinolaryngology department from 2016 to 2018. The aim is to revise the indications, sedation techniques and peri-procedural complications, in order to validate DISE as an ambulatory procedure.

Results: We retrospectively identified six patients submitted to DISE in a tertiary hospital otorhinolaryngology department from 2016 to 2018. One female, five males.
Mean age 50.8; range 36-65 years old. BMI range from 22 to 27.4 kg/m^2. Concurrent pathologies: smoke abuse, OSAHS, hypertension, previous heart failure, depressive disorder. The sedative agent used was propofol in all cases, by bolus or Target-controlled Infusion (TCI). Bispectral Index (BIS) was used in 2 cases. 3 patients were also submitted to surgery. All patients stayed in recovery for one night. No registry of complications. Increasing age was not associated with higher index of complications. Limitations: small sample; retrospective analysis.

Conclusion: The analyses of the cohort permitted us to conclude that complications are rare. DISE can be and should be performed as an ambulatory procedure in the majority of cases. It guarantees patient's safety while optimizing cost-effectiveness. Despite the small number of patients submitted to DISE in this study, best practice tendency shows it will increase, so all health care professionals involved should be routinely trained to perform it.

Laparoscopic Sleeve Gastrectomy in an Ambulatory Surgery Setting Retrospective Study

Bernardo Maria; João Timóteo; Alberto Figueira; Jelena Neves; João Coutinho
Centro Hospitalar Lisboa Norte - Hospital de Santa Maria

Introduction: Laparoscopic sleeve gastrectomy is an effective option for the treatment of morbid obesity. With its growing and widespread practice, some centers started to apply this procedure in ambulatory surgery centers – is this a safe approach when compared to its in-patient counterpart?

Materials and Methods: A retrospective analysis was performed over all patients who underwent laparoscopic sleeve gastrectomy in an ambulatory surgery center from May 2014 to March 2018. We approached the inclusion criteria for the procedure, the multidisciplinary evaluation of each patient, intra and perioperative protocols adopted and the incidence of complications.

Results: This study included a total of 358 patients (300 female, 58 male), with an average age of 43,1 years. Mean body mass index before surgery was 43,09 kg/m2. Average procedure length was 47 minutes and average postoperative care unit length of stay was 4 hours and 29 minutes. There were 27 cases of complications (7,54% - 3 cases of stapple line dehiscence; 7 cases of stapple line leak; 3 cases of persistent abdominal pain; 1 case of upper GI bleeding; 4 cases of residual hematoma; 7 cases of hemoperitoneum; 2 cases of persistent vomiting) and 2 deaths (0,56%). There was need for surgical re-intervention in 17 patients (4,75%).

Conclusion: A growing number of evidence, as the numbers we here present, support laparoscopic sleevegastrectomy in an ambulatory setting as a viable option, with results comparable to the inpatient setting and with all of the advantages of ambulatory surgery. More studies are needed to definitively determine selection criteria to maximize the safeness and effectiveness of this procedure.

Ambulatory Surgery In Portugal: Physical Limitations and Recourse to Health Services After Discharge

Cristóvão Pinto; Tiago Hipolito; Liliane Godinho; Miguel Pratas; Gorete Ferraz; Jorge Aires; Cândida Infante; Ana Vieira

CHUC

Introduction: With increasing numbers of patients being treated on an ambulatory basis it is important to ensure that patients are being discharged safely and are followed up appropriately. Recovery as far as the patient is concerned, they still have to go through the late stage, and it may be days or even weeks before they return to their preoperative physiological status. In this late recovery period the patient may also run into complications of anesthesia and surgery which require further contact with the hospital or with their own family practitioner.
With the present study, we aim to indicated if patient have limitations in their daily activities and if they resort to health services after discharge of an ambulatory surgery unit in Portugal.

Material and Methods: Retrospective observational study, including patients (P) admitted to Ambulatory Surgery performed between 01/2018 and 11/2018. P were recruited after a survey of patient admitted in ambulatory surgery unit and that answer the phone call from nurseries team after 24 hours of surgery. 8,16% with age between 18-25 years; 8,15% between 26-35 years; 14,33% between 36- 45 years; 20,46% between 46-55 years; 19,72% between 56-65 years; 15,29% between 66-75 years; 10,97% between 76- 85 years and 2,76% over 85 years. The first endpoint we look if they have physical limitations in their daily activities. As second endpoint we want to understand if they fall back on needs of healthcare services.

Results: 4497 were admitted and performed an ambulatory surgery. Only 3656 answer the phone call after 24 hours. In this study 28,61 % patients have no limitation; 62,53% show some limitations linked with surgery; 1,09% have only limitation with personal hygiene and 7,77% confirmed that they move inside our house with some limitations. In another point we observed that 48 patients resort to health services.

Conclusion: This study can show that patients have some limitations in daily's activities after 24 hours of discharge and the highlight the need for adequate patient education about the problems in the postoperative period, and specific instructions about who contact in the event of any difficult. The recovery process ends when the patient is able to return their normal daily activities, including driving an automobile. It is important to ensure that the increasing number of ambulatory patients are discharge into the community at an appropriate time, with effective follow-up and referral procedures.

Outpatient Rate – What Factors Influence It?

Catarina Rodrigues[1]; Aida Paiva[2]; Regina Silveira[3]; Filipe Martins[4]; Bárbara Gama[1]; Isabel Campos[5]; Nisalda Rosa[4]

[1] Interna de Cirurgia Geral, Hospital da Horta; [2] Assistente hospitalar graduada de Anestesiologia, Hospital da Horta; [3] Enfermeira coordenadora da Cirurgia de Ambulatório, Hospital da Horta; [4] Assistente hospitalar de Cirurgia Geral, Hospital da Horta; [5] Enfermeira, Hospital da Horta

Introduction: The area of influence of the Hospital is 45000 inhabitants, dispersed by 5 islands. The Ambulatory Surgery Unit also receives patients from the same source. The authors intend to understand which are the factors that negatively influence the outpatient rate, in the specialties of General Surgery and Ophthalmology.

Methods: Retrospective study of the year 2018 by consultation of the clinical process (SClinico). Specialties of General Surgery and Ophthalmology were studied because they are the ones with the greatest expression.

Results: In the Ophthalmology specialty, 444 patients were operated: 433 (97.52%) in the outpatient setting; and 11 (2.47%) in the inpatient setting, 7 of them by clinical criteria and 4 by social criteria. In the General Surgery specialty, 177 patients were operated. A total of 84 (47,46%) patients were operated in the outpatient setting: 2 from Flores; 8 from São Jorge; 2 from Corvo; 39 from Faial and 33 from Pico. 93 patients (52.54%) were operated in the inpatient setting, of whom 11 were from Flores, 3 from São Jorge, 1 from Corvo, 33 from Faial and 45 from Pico. Hospital admission was due to clinical criteria in 70 patients (75.26%), social conditions in 1 patient (1.07%) and no known cause in 22 patients (23.66%). Of these 22 patients, 5 were from Flores, 1 from Corvo, 4 from Faial and 12 from Pico.

Conclusions: The authors concluded that the clinical factors are the basis of the greatest number of hospitalizations. However, in the General Surgery specialty, 23.66% of the patients are hospitalized without clinical or social reason, which may reflect that the origin of the patients living in an archipelago can influence, in this specialty, the rate of surgery on an outpatient basis. Regarding the specialty of Ophthalmology, the same does not occur, since 97.52% are operated in the outpatient clinic. This leads the authors to conclude that the provenance is not a reason to reduce the outpatient rate, especially when the Hospital provides free accommodation for the patient and respective companion. But in spite of this fact, it seems to us that the provenance weighs negatively on the decision to perform the outpatient surgery in different specialties, which in the future will be a factor to improve.

A Successful Transformation Of Day Case Breast Surgery

William Hare; Alexandra Humphreys; Jacqueline Rees-Lee; Michael Green; Mary Stocker
Torbay and South Devon NHS Foundation Trust

Introduction: The British Association of Day Surgery (BADS) recommends that 95% of conservative breast cancer surgery and 50% of mastectomies for breast cancer are performed as day case procedures. Despite our hospital being one of the topperformers in the country for day case rates for most procedures, in January 2015 we were ranked in the lowest quartile nationally for day case rates for breast cancer surgery. We present our strategy for revolutionising our day case breast surgery service.

Materials and Methods: A multidisciplinary team developed day case pathways for patients undergoing breast cancer surgery. Each pathway detailed comprehensive plans for pre-operative care, day of surgery treatment and post-operative management. In January 2015, the pathway for conservative surgery was introduced. The pathway for mastectomies was introduced in January 2017.

Results: Between 1st January 2015 and 30th September 2017, the day case rates for conservative surgery improved from 16.5% to 97.8%. During the same time frame, the rates for mastectomies improved from 0% to 85.7%. Between 1st October 2015 and 30th September 2017, 350 procedures were successfully performed as a day case.

Follow up data exists for 288 (82%) of these patients; 100% of these patients were satisfied with the day surgery service provided. National benchmarking for day case rates now rank us as14th for mastectomy, 3rd for wide local excision of breast tissue and 2nd for sentinel lymph node biopsy.

Conclusion: By introducing these pathways, we have revolutionised our service, achieved the BADS day case targets and are now one of the top performers nationally. Our comprehensive data shows that this has been safe and that the great majority of patients are satisfied with their care taking place in a day case environment.

Which Parameters are Sending Patients Proposed for Ambulatory Surgery Back to Inpatient Care? – A 5-Year Retrospective Analysis

João Oliveira[1]; Sandra F. Ramos[5,6]; Manuel B. Cruz[7]; Isabel Novais[1,3]; Carlos Magalhães[2,3]; Marisa Santos[1,3,4]

[1] Serviço de Cirurgia Geral, Centro Hospitalar Universitário do Porto, Porto, Portugal; [2] CICA – Centro Integrado de Cirurgia Ambulatória do Centro Hospitalar Universitário do Porto, Porto, Portugal; [3] Instituto de Ciências Biomédicas Abel Salazar, Universidade do Porto, Porto, Portugal; [4] Unidade de Cirurgia Colorretal do Centro Hospitalar Universitário do Porto, Porto, Portugal; [5] Mathematical Engineering Lab, ISEP, School of Engineering, Polytechnic of Porto; [6] Center of Statistics and Applications, Lisbon University; [7] LEMA, Mathematical Engineering Lab, ISEP, School of Engineering, Polytechnic of Porto.

Introduction: Ambulatory surgery has grown consistently in the last 50 years in developed countries and more recently in developing countries as well. However, some patients that are primarily referenced for surgical treatment in an outpatient scenario are declined and oriented to inpatient care. In this work, we intended to identify which variables led the redirection of patients from outpatient to inpatient care and propose strategies that may render the possibility to include this subset of patients in the future in the ambulatory setting.

Materials and Methods: We reviewed 1591 patients that underwent abdominal hernia repair over a 5-year period (01/01/2014 a 31/12/2018) in our hospital at inpatient setting. Eighty-one of these 1591 patients were initially proposed for surgery in an outpatient setting (our ambulatory centre conducts approximately 10.000 appointments yearly) and were declined and redirected to inpatient treatment. Several variables were analysed including: age, gender, BMI, smoking and alcohol consumption habits, type of pathology, origin (social/Anaesthesiology/Surgery/other) and reason to be declined, existence of cardiac stent/pacemaker/CDI, presence of blood thinning medication, type of anaesthesia used, ASA and Mallampati grades, time of discharge after surgery and post-operative complications.

Results & Conclusion: Our patient sample had a 1:3 female:male ratio of (24.7%/75.3%) and an age average of 64.6 (± 13.3) years. Eighteen per cent of patients were redirected due to social reasons, which is indeed one of the criteria that limits the acceptance for ambulatory surgery in our centre. This subset of patients was not included.

The remaining patients (82.1%) were excluded after evaluation by Anaesthesiology (82.1% - mainly due to cardiovascular 32.7%, respiratory 43.6%, anticipated intubation hazard 16.4% and prior anaesthesia difficulties 3.6%) or Surgery medical staff (17.9% - mainly due to size and chronicity of the hernia). Furthermore, 86.6% were classified as ASA 3 or superior, 52.2% presented with 2 or more cardiovascular risk factors. Time until discharge was 2.82 (±3.94) days including weekend stays. Complications after discharge occurred in 8.95% of patients and consisted of hernia relapse in all.

We expect this work can contribute to anticipate and overcome precise needs of specific patients in an ambulatory setting, ultimately benefitting the patient and reducing overall health costs.

‘Here Today, Gone Today’ – Evaluating an Emergency Ambulatory Pathway

Uys Ciska; Hare William; Theresa Hinde; Mary Stocker
Torbay and South Devon NHS Trust

Introduction: Urgent minor or intermediate surgical procedures account for a significant proportion of booked emergency cases in our trust. By implementing a novel day surgery pathway for an appropriately selected cohort, we have improved patient flow and experience, saved theatre time and decreased bed occupancy in a cost-neutral fashion.

Methods: Vacant but staffed day surgery lists were highlighted to emergency teams in advance. At daily handovers the emergency teams identified patients fulfilling emergency ambulatory surgery criteria. Stable patients may also have been sent home, instructed to return to the day surgery unit (DSU) for their urgent surgery. The aim was for surgery and discharge via the DSU using the pathway. A small proportion had their emergency surgery performed in main theatres, but were discharged via DSU on the same day.

Results: Over 22 months (April 2017 to Jan 2019) 442 patients (18 children, 424 adults) underwent emergency surgery via the ambulatory pathway. This freed 385 hours 52 minutes of emergency theatre time, saving around £347,280 (at £15 per minute). 370 patients (83.7%) were successfully discharged on the day of surgery. 301 (68.1%) of these patients were not admitted until the day of their operation, thereby avoiding a pre-operative night stay, saving 671 bed days and generating estimated cost savings of £268,400 (£400 per night).

A total of 257 patients (58.1%) gave telephone feedback with 90% describing their general feeling as ‘good’ or ‘very good’.

Conclusions: Streamlining our ambulatory pathway for emergency patients has created an efficient way to reduce costs and save theatre time whilst maintaining excellent patient satisfaction. This pathway and its successful results have been well received by surgical, anaesthetic, theatre and recovery teams. Theatre culture has changed with the expectation that ambulatory lists should be made available and the pathway is now used when elective list capacity allows to include ad hoc emergencies. Furthermore, growing confidence with the process has enabled more complex procedures such as gynaecological laparoscopies, laparoscopic appendicetomies and “hot” laparoscopic cholecystectomies to be undertaken as ambulatory procedures.

Ambulatory Hernia Surgery Under Local Anesthesia – Our First Steps

Cristina Hasse Velez; Rosa Félix; Susana Ribeiro; Arnaldo Machado; Rita Fernandes; Jorge Caravana
Hospital do Espírito Santo de Évora - Serviço de Cirurgia Geral

Introduction: According to European Hernia Society guidelines, most open inguinal hernia techniques are eligible for local anesthesia and ambulatory surgery should be considered in ASA I and II patients. Hernia surgery in our Surgical department has mainly been performed under regional or general anesthesia as inpatient surgery. Being inguinal and umbilical primary hernias usually suitable for local anesthesia and ambulatory surgery, when faced with restraining of operatory room schedules, our department started implementing it. We present here our path from deciding to practice ambulatory surgery and local anesthesia to starting to actually do it. We then show the results of our first 7 months of practice.

Materials and Methods: We performed a thorough research on local anesthesia techniques and their appliance in hernia surgery and then discussed the drugs used and the technique with our fellow anesthesiologists. We then build a checklist encompassing patient selection, pre-operative evaluation and before, during and after procedure major points. We also designed a preoperative care check-list to the nurses of the ambulatory surgery department and a list of the material needed, to inform all the operating room personel before the surgery. We made a presentation to our department of the protocol created. We obtained the ethics committee approval to perform a retrospective evaluation of the surgeries performed.

Results: Between June and December 2018 we performed 52 ambulatory hernia surgeries under local anesthesia. We had no major technical difficulties and no major complications So far we had no hernia recurrences. Our patients reported a high degree of satisfaction with their surgical experience and said that if needed they’d rather be operated in the same conditions again. We had one immediate complication needing inpatient care, which was a patient with symptomatology of femoral nerve palsy, with full resolution within 8 h, in accordance to the literature, and the patient was discharged asymptomatic in the first post-operative day.

Conclusion: Ambulatory hernia surgery under local anesthesia has so far, been a very positive experience for our department and our patients. We performed a reasonable amount of procedures which allowed us to shorten our waiting list, our junior doctors got the chance to perform more surgeries and, the most important, our patients were managed safely and effectively and were very satisfied with their experience.

Patient Safety in UCA: Nursing Team Strategies

Ana Fontes Brandão; André Monteiro; Carla Ferreira; Elisabete Azevedo; Leticia Sousa
ULSM

Objectives: To identify the practices of Safety and risks of patients in the UCA; Reflect on the perioperative nursing in the UCA and the safety of nursing care: Recognize improvement of patient safety at IICA, as a strategy for the continuous improvement of the quality;
Promoting a culture of security in the UCA Introduction Patient Safety is a key component of the quality of health care, whether for the users, or for the professionals, having been published in Diário da República, 2nd series N.º 28 February 10, 2015 THE NATIONAL PLAN FOR THE SAFETY OF PATIENTS 2015- 2020.
The Perioperative Nurses are responsible for the provision of individualized care in the BO / UCA, covering health promotion, prevention and rehabilitation, as well as the adoption of measures to ensure a safe environment. Of their caring activities there are several that are related to patient safety, such as infection prevention, pain control, maintenance of body temperature, adequate surgical positioning, as well as the how they relate to the patient.

Patient safety practices at the UCA practiced by nurses in order to risks consist of: physical and psychosocial security; security in the unambiguous identification of patients; biological security; chemical and toxic; safety in the use of medication; safety (namely the application of LVSC); anaesthetic safety; environmental physical security; communication security; prevent the occurrence of falls and pressure ulcers, and to ensure that the systematic practice of incident notification, analysis and prevention.
There are several measures implemented by IICA's nurses in their daily practice in order to ensure the safety of the surgical patient, the control of risks, as well as protocols institutional and ambulatory surgery services. A surgical intervention represents a specific emotional load, and the nurse, as element responsible for patient care, plays a key role in anxiety. In a surgical context, the principles of risk management should be applied in all activities, namely in the express consent and information of the patient about the care process, in their preoperative preparation, including evaluation and communication of their needs, in their identification and verification of the process during its monitoring during the entire perioperative period.

Measuring Postoperative Quality of Recovery in Ambulatory Surgery

Raquel Pontes; Rita Silva; Elisa Ferreira; Inês Aguiar; Ana Marcos
Centro Hospitalar de Vila Nova de Gaia/Espinho

Introduction: The QoR-15 questionnaire has a Portuguese validated version and provides a reliable and easy-to-use method of measuring the patient's postoperative quality of recovery (QoR). Five dimensions of health status are evaluated: pain, physical comfort, physical independence, psychological support and emotional state. The 11-point numerical rating scale leads to a minimum score of 0 (very poor recovery) and a maximum score of 150 (excellent recovery). We present the results of a study assessing QoR in 100 ambulatory surgery (AS) patients.

Materials and Methods: After approval by ethics committee, we conducted a prospective study of adult patients scheduled for elective AS, in different specialties, under general or locoregional anaesthesia. Patients were excluded if they had a psychiatric disturbance, a medical condition precluding cooperation or if less than 18 years. As a baseline measure, QoR-15 score was performed preoperatively on the day of surgery and repeated at 24h, seven and thirty days after surgery by phone contact. The QoR-15 was evaluated using data from patients who responded at all 4 timings.

Results: Of the 100 patients inquired, 82% completed all 3 post-operative QoR-15, with the remaining 18% responding to at least one questionnaire. Comparing to the preoperative baseline score, total QoR-15 scores did not significantly change in the first 24h after surgery but significantly exceeded it on day 7 and day 30. Regarding to the different dimensions, the 'physical comfort' score did not significantly change in the first 24h but significantly increased on day 7 and day 30. The 'emotional state' scores exceeded pre-operative level up to 30 days ($p<0.001$ at all times). In contrast, 'physical independence' scores fell from the pre-operative level up to 30 days ($p<0.001$ at all times). No significant differences were found between sexes and post-operative QoR-15 scores. Significant differences were found between age and QoR-15 scores in the first 24h and on day 7.

Conclusion: The high response rate indicates that the QoR-15 is a plausible outcome measure for AS. 7 and 30 days QoR-15 scores exceeded preoperative values, suggesting that measurement on the day of surgery may not be an ideal baseline for comparison. Its measurement in 3 post-operative timings is feasible but requires dedicated staff, so it is necessary to better identify the ideal timing for administering the follow-up call.

Lacrimal Fossa Block: An Effective Choice For Ambulatory Endoscopic Laser Dacryocystorhinostomy

Sara Alves; Rafaela Silva; Joana Veiga; Paulo Almeida; Erica Carvalho; Celina Oliveira; Miguel Caridade; Carla Ferreira

Hospital de Braga

Introduction: The endoscopic laser dacryocystorhinostomy (EL DCR) is an established alternative to external DCR in cases of nasolacrimal duct blockage. It is an effective, simple and less invasive surgery and it can be done in ambulatory setting. Since many of the patients proposed to EL DCR have significant comorbidities, locoregional techniques are the best option.

Materials and Methods: We carried out a retrospective study of EL DCR performed at our institution using lacrimal fossa block from January 2015 to January 2019. The effectiveness of the locoregional technique, perioperative complicationsand the need of complementary analgesia till 24h after the surgery were evaluated.

Results: 61 EL DCR were performed using lacrimal fossa block. The sample studied included 11 male and 50 female with an average age of 65 years. To the procedure we use ASA standard monitoring. Along with regional block, we used intranasal 10% cocaine paste (15 min. before surgery) and light sedation. Paracetamol was used for multimodal analgesia in perioperative time. To perform lacrimal fossa block, a 25G needle was inserted between the caruncle and the medial canthus, initially directed postero-medially towards the medial orbital wall, and, at a depth of 2-3mm, 1mL of local anesthetic (LA), 1% ropivacaine and/or 1% lidocaine, was deposited. The needle was then redirected towards the coronal plane and advanced until contact with medial orbital wall and 1mL of LA was injected. Finally, the needle was repositioned in an inferior direction and 2 injections of 2-3mL of LA were made. A total of 3-4 ml of LA was used. Extravascular needle placement was confirmed by aspirating the syringe before each LA injection. There were no ocular or vascular complications. No patient required sedation or conversion to general anesthesia for inadequate local anesthesia. In 23 cases, it was necessary additional analgesia with paracetamol or ibuprophen, in the first 24 hours.

Conclusion: In all cases of the study, the lacrimal fossa block was performed with no complications and no need to convert to general anesthesia. In conclusion, lacrimal fossa block is simple to perform, well tolerated, effective, associated with low morbidity and almost no complications, and, consequently, being the ideal for day case surgery. To futureresearch, we suggest evaluation of patient's pain and satisfaction 24h postoperatively.

Satisfaction Survey of Cataracts in the Hospital Malvarrosa. 10 Years Management Nurse

José Vicente Monge Rubio; Ana Albert Llacer; Sara Donderis Berrazpe; Nuria Matali Amado; Pilar Lopez Lopez; Montserrat Nieto Rovira; Felicidad Villaescusa Ruiz; António Duch Samper

Introduction: Measuring patient satisfacition is a main indicator of quality of assitance processes as recognized by various health services. In Malvarrosa Hospital cataracts surgery represented in 2008 about 40% of the major ambulatory surgery that was performed, being operated on more than 3.000 pacients treated per year.

Materials and Methods: Until 2009, given the high volume of patients operated cataract it had not been able to undertake the task of measuring the perceived satisfaction of patients operated cataract. From this year, ophthalmologic team Hospital nursing collaboration with the team of ophtalmologists and Hospital Quality department designs a survey to determine the satisfaction of these patients and is responsible for managing all circuit delivery, collection and subsequent analysis of results. In a video we collect the developments in these 10 years of the survey, its changes and its various utilities.

Results and Conclusion: Satisfaction Survey Cataract has been a very useful and versatile instrument. Allows measurement of user satisfaction, is the engine of change for ophthalmology service by introducting proposals for improvement and provides health staff motivation through the quarterly feedback is performed.

Ophthalmological team Malvarrosa Hospital nursing is heavily involved in this program, having participated in the implementation of the survey and being the lead manager of its operation and working in one of the main indicators of the quality of cataract surgery.

Ambulatory Total Hip Replacement – A Pilot Feasibility Project

Anne-Marie Bougeard; Michael Kent; Alex Alen; Claire Blandford
Torbay and South Devon NHS Foundation Trust

Introduction: Enhanced recovery following total hip replacement (THR) has been usual practice at our institution for some years. In 2011 we established a successful day case pathway for unicompartmental knee replacement. Patient preference for recovery at home and pressures on capacity within the NHS make day case arthroplasty an attractive option. We sought to evaluate the feasibility, safety and acceptability to patients of day case THR in our unit.

Materials and Methods: We used quality improvement methodology including process mapping of inpatient THR pathways and audit of specific aspects of care in first 12 hours to re-write our pathway. We revised our THR protocol with changes to anaesthesia (including short acting spinal anaesthesia, minimal sedation, local anaesthetic infiltration to surgical field) and analgesia (with the addition of short-course modified release opioid analgesia to multimodal simple regimes). Targets for early mobilisation and criteria for discharge were set.

Patients were identified (ASA 1-2, BMI <30, age <75) and consented for a planned day case procedure. The operation was planned as the first case on the morning list. Patients were followed up in person on day 1, day 3 and day 7 or 10 with telephone contact in between. Satisfaction scores were collected in addition to qualitative data on experience.

Results: To date we have performed 12 THRs as day case, 100% of those planned. There were no failed discharges, no readmissions and no complications. All patients were ambulant within 2 hours of leaving primary recovery. Quality of recovery was good, with all patients reporting mild or moderate pain only. Patients showed high levels of satisfaction with the pathway and would recommend it to others. Second side patients preferred this pathway to their previous inpatient stay. One patient has had both first and second side THRs as a day case.

Conclusion: Our experience has demonstrated that day case THR is a safe and effective pathway in our unit for suitable patients. We have had high levels of patient satisfaction. We anticipate embedding this pathway with the aim of increasing our proportion of day case THR and will use this experience to improve processes for patients on our inpatient pathway, to encourage earlier mobilisation and discharge. A day case pathway offers clear benefits to patients and the institution, which may translate in to increased capacity for inpatient work over time.

Bilateral Hallux Valgus Osteotomies, A Safe Procedure for Ambulatory Surgery

Bruno Morais; Frederico Teixeira; Ana Ferrrão; Nuno Marques
Centro Hospitalar Universitário Lisboa Central

Introduction: Hallux Valgus is a very common pathology with great impact on patients' life quality. Osteotomies of the first metatarsal are the gold standard to correct moderate to severe cases. There has been a great development in the past decade but there are still concerns about treating these patients as outpatients even though there is already evidence supporting otherwise. In our hospital, we perform this procedures in the ambulatory centre. This study intends to show the security about these osteotomies not only in unilateral osteotomies but also in bilateral cases.

Materials and Methods: We reviewed the last five years (2014-2018) of patients treated at our ambulatory unit. We consulted follow-up charts performed by the ambulatory nurses postoperative, 24h and 7 days after surgery and the follow-up records by the surgeon. The range of follow up were between 12 and 24 weeks. The patients were initially prescribed with mild pain protocol (analgesics) or moderate pain protocol (analgesics + NSAIDs). No patient was prescribed with severe pain protocol (opioids).

Results: We found a total of 165 patients, 26 cases (15.8%) were bilateral. 151 were primary osteotomies and 16 were revisions, 2 of which were bilateral. 69 patients were submitted under multiple osteotomies on the same foot (31.5%) 7 of them (26.9%) in the bilateral group. 52 were performed under general anaesthesia, 48 subarachnoid spinal block and 39 with peripheral block. We reviewed the analogic visual scale recorded (0-10) in tree moments: postoperative, 24 hours and 7 days after surgery. The mean results were 0.6, 2.2 and 1.8 in unilateral patients and 1.3, 2.6 and 2.3 bilateral ones. In the unilateral group, there were 9 cases (6.5%) of foot pain after 4 weeks and 5 after 12 weeks, and in the bilateral group 3 cases (11.5%) of pain after 4 weeks and 2 cases after 12 weeks. There were 6 cases (4.3%) of delayed wound healing in the unilateral group and 1 (3.8%) in the bilateral group. 5 unilateral patients (3.6%) were reoperated and 2 (7.7%) in the bilateral group. There was no need to admit any patient.

Conclusion: We showed with this revision that foot osteotomies are safe and adequate procedures for ambulatory surgery. We focused on the comparison between unilateral and bilateral cases with both of them with good results and low complication rate. We intend to give strength to the standardization of these procedures as ambulatory procedures even for revision and bilateral cases.

SClinic Module in Ambulatory Surgery

Catarina Fonseca; Furtado Mª José; Vera Araújo; Marta Borges; Alice Barreira
CHTMAD - CICA - LAMEGO UNIT

The SClínico module in Ambulatory Surgery was developed by SPMS and CHP / CICA in association with the APCA in order to overcome the difficult sharing of information between professionals and hospitals, the lack of clinical records structured, as well as the difficulty in obtaining indicators. The CAME of Lamego of CHTMAD started its implementation in stages from October 2018, contemplating, in the last quarter of that year, 640 users. Methodology: retrospective descriptive study. Objectives: to describe the computerized circuit of the surgical user (SClinic); share our experience and carry out a swot analysis of the implementation of this project. The result of the analysis of this work tool allowed the development of and contribute to benchmarking.

The Day Surgery Treatment of Varicose Vein Disease with Postthrombotic Syndrome

Vladimir Aleksanyan; Vladimir Inzhevatov; Andrey Isaev
Demikhov Moscow City Hospital

Introduction: This study aimed to confirm the efficacy and safety of varicose vein surgery among patients with postthrombotic syndrome on a day basis.

Materials and Methods: During the period 2013-2019, in Moscow city, in one free-standing surgery unit and two integrated surgery units were successively performed 5065 operations (phlebectomy with minimally invasive techniques) in 3889 patients with varicose vein and postthrombotic syndrome. Among 3889 patients who underwent surgery, 332 (8,5%) patients had a history of previous deep vein thrombosis (DVT), of these, 147 patients with proximal DVT and 185 patients with distal DVT respectively. Furthermore, 124 patients (71 patients with proximal DVT and 53 patients with distal DVT) had additionally a previous episode of pulmonary thromboembolism. The CEAP classification is used to describe the degree of varicose veins. All patients divided into 4 grades: C3 – 49(14,7%); C4 – 89(27%);C5 – 61(18,4%); C6 –133(40%).
The patients with proximal DVT: C3 – 19(13%); C4 – 47(32%); C5 – 24(16,3%); C6 –57(38,7%).
The patients with distal DVT: C3 – 29(15,6%); C4 – 43(23,2%); C5 – 36 (19,4%); C6 –77(41,6%).
Thus, 85% patients were with chronic skin changes or ulceration, or both. All patients were evaluated using the Caprini risk assessment and were at high risk, more than 3 points.
All procedures were performed under spinal anesthesia. Patients received appropriate anticoagulant medication before and after operation during 3-12 months.

Results: No statistically significant difference in the severity of clinical manifestations,

depending on the level of thrombosis, was found. Postoperative venous duplex didn`t show any recurrent deep vein thrombosis in operated patients. In group of 57 proximal DVT class C6 patients venous ulcers healed without recurrence in 49 (86%) patients. The recurrence occurred in 6 (10,5 %) patients. In group of 77 patients with distal DVT class C6, venous ulcers healed in 65 (84,5%) patients during the first month. Nevertheless, during the first year in 8 (10,4%) class
C6 patients ulcer recurrence occurred, but the size of ulcers were small and rapidly resolved under conservative treatment. There were no hospital readmissions in all groups of patients.

Conclusion: The elective surgery of varicose veins with postthrombotic syndrome on a day basis is safe and effective due to appropriate anticoagulation therapy.

Peribulbar Block for Ambulatory Vitrectomies: A Safe and Effective Option for Patients at Risk for General Anaesthesia

Petra Alves; Adriana Rodrigues; Carla Hipólito; Celina Oliveira; Graça Horta; Vicente Vieira
Hospital de Braga

Introduction: Vitrectomy is performed to treat retina and vitreous pathology. The anaesthetic technique depends on patient cooperation and morbidities, length of surgery and surgeon's preference. In the peribulbar block (PB), the anaesthetic is injected into the extraconal compartment, which avoids most of the complications associated with retrobulbar block used in the past. General anaesthesia (GA) is the most frequent option. The aim of this study is to compare outcomes with PB and GA in vitrectomy.

Methods: Retrospective review of the patients who underwent vitrectomy between 2017 and 2018 on an outpatient basis. We divided the patients in two groups: group 1, the case study group, comprised the patients in whom a PB was performed, in a total of 18 patients; group 2, the control group, included patients who underwent GA, in a total of 344 patients, of which we randomly selected 18 for comparison. The following variables were assessed: American Society of Anesthesiologists (ASA) Classification, time until hospital discharge, nausea and pain 24 hours after hospital discharge. Statistical analysis was performed using SPSS 23.0. The level of significance to reject the null hypothesis was $p \leq 0.05$. The tests used were Mann-Whitney U test and Chi-square test.

Results: In group 1, most of the patients were classified as ASA 3 (61%); 22% were ASA 4. On the other hand, group 2 patients were equally divided between ASA 2 and 3. Mean time to hospital discharge was 152 minutes after GA and 97 minutes after PB, with a statistically significant difference ($p<0.000$). The 24-hour postdischarge assessment showed no statistically significant differences in terms of nausea ($p=0.146$), but there was a statistically significant difference in mild pain ($p=0,015$), with pain reported more frequently with GA.

Conclusion: We found a reduced number of patients undergoing vitrectomy with PB, probably because locoregional anaesthesia is chosen more often for patient with complex medical problems, consequently prone to be admitted on an inpatient regimen. From our analysis and experience, PB is a safe technique with low rate of complications and with a postoperative care easily managed at home. Thus, we believe that most of these patients could be done as ambulatory surgery under PB. Compared to GA, besides lower scores of postoperative pain, PB can reduce the time to discharge. Outpatient surgery is less expensive and more convenient for the patient than inpatient admission.

Day Surgery Preoperative Assessment in the Elderly: Challenges or Constraints.

Catarina Teixeira
Unidade de Cirurgia de Ambulatório - Hospital Curry Cabral - Centro Hospitalar Universitário de Lisboa Central

Introduction: Emerging technological innovation is associated with an increased raising of the surgical procedures among elderly patients. The principal advantage of day surgery for elderly is the possibility to maintain or restore independence and avoiding functional decline, recovering in their own environment. It is recognized that dependency and decreased functionality predict worse perioperative outcomes. The high prevalence of multiple comorbidities, chronic diseases, loss of independence and frailty in this population demands a comprehensive geriatric assessment, that would potentially facilitate a greater understanding of the elderly needs and promote the development of nursing interventions to ensure optimal nursing care. High patient turnover during time-limited nurse-patient encounters should urge nurses to play a more active role in their responsibility towards elderly patient education. Due to this, a project has been initiated aiming the development of a systematic nursing intervention to elderly people and their families during day surgery preoperative nursing consultation.

Materials and Methods: A project-based learning methodology was conducted in order to develop a structured intervention, within the creation of an assessment tool for elderly during day surgery experience and its implementation on the preoperative nursing consultation, as well as a guidebook to support nursing staff. The multidimensional assessment tool was implemented during 4 weeks to 10 participants.

Results: The application of the assessment tool was consistently, with completeness in all domains. More accurate nursing data and more preoperative information was obtained, which help developing a more comprehensive nursing care plan meeting elderly expectations and needs. In the first stage, one hundred per cent were completed and in the second moment, seventy per cent. However, a demanding higher consultation time limited the application of the tool.

Conclusions: This path allowed the implementation of the assessment tool at the preoperative nursing consultation and the standardization of the nursing records. Due to time constraints, the systematic implementation of the assessment tool was not possible.
Further implementation of the tool is required to continue this changing process towards the continuous improvement of quality and achieving health gains. Relevance to clinical practice: nurse-delivered education promotes better outcomes in day surgery elderly patients.

Surgical Procedures on the Diabetic Foot

S Ganapathy Krishnan
Apollo Hospitals, Chennai, India

Diabetes is a major non-communicable disease and India is soon slated to be the diabetic capital of the world. India accounts for about 50% of the world's diabetes burden. About 72 million cases of diabetes were reported in 2017, which is more than 7.5 % of the adult population, and it is expected to double by 2025 as per an Indian Council of Medical Research report. The average age of onset is around 42.5 yrs and nearly 1 million people die every year due to diabetes. The high incidence is due to a combination of genetic predisposition associated with a high calorie, low activity lifestyle of a growing middle class population.

Diabetic foot syndrome is probably one of the most significant and devastating complications of diabetes. It is a combination of ischemia, neuropathy and infection which leads to an ulcer ultimately ending up in an amputation. About 15-20% of diabetics develop a foot ulcer and atleast 85% end up in amputations. Early identification of a diabetic foot syndrome and early effective management of the infection/ulcer go a long way in preventing further complications and possibly avoiding amputations.

In india many patients do not have insurance cover and the public health care system is also not very accessible and effective. Many patients with insurance fail to get it covered due to the diabetic foot being a complication of a pre existing disease and have to pay from their pockets for the entire treatment. In the private and corporate sector hospitals admitting these patient and planning surgery becomes very expensive. We therefore have to manage most of these patients as day care procedures and almost all of them can be efficiently managed thanks to advances in anesthetic care and better treatment modalities for the diabetic status.

A wide spectrum of surgical procedures for the diabetic foot syndrome is being done as day care procedures. These vary from simple to radical debridement of infections, decompression of nerves, skin grafting, local and regional flaps for foot ulcers, to minor and even major limb amputations. We present here a wide variety of surgical procedures for the diabetic foot syndrome being done in our tertiary care corporate hospital as day surgeries over the last few years.

Paediatric Walk In Clinic: Preoperative Evaluation For Ambulatory Surgery

Carlos Barbosa; Cristiana Campos; José Gomes Costa; Sandra Pé D'arca; Ana Paula Silva
Hospital Pedro Hispano

The pediatric ambulatory surgery has suffered great improvements in recent years due to the evolution of surgical and anesthetic techniques, allowing increasing safety and efficiency, but logistics are an important factor as well.
With this in mind, we present the "Walk in Clinic" for pediatric patients, a three steps model of preoperative management running in our hospital to maximize efficiency and child and parents' satisfaction. It consists of three consultations in sequence during a single hospital visit. When a surgical condition suitable for ambulatory setting is identified, the child is sent to the "Walk in Clinic". Here are three steps: Surgeon, Anesthesiologist and Nurse consultations. It allows enrolment of the child, pre-anesthetic assessment and performance of auxiliary tests. During this path parents also get informed regarding logistics, day surgery preparation before admission and post-operative care at home.
This way it is possible to increase efficiency, reducing the number of hospital appointments and minimizing the time between diagnosis and treatment, reducing costs and also work and school absence. Overall this solution fits institutional goals and simultaneously increases both child and parents' satisfaction.
We present a video displaying this course as seen from a child's point of view.

Perioperative Management of Diabetes in Elective Ambulatory Surgery

David Robinson; Madhu Ahuja
The Royal Wolverhampton NHS Trust | West Midlands, United Kingdom

Introduction: Diabetes is extremely common amongst the surgical population but is still poorly managed by all specialities throughout the perioperative period. Best practice perioperative management mirrors the core principles of ambulatory surgery and enhanced recovery.

A recent national audit in the UK showed that 60% of diabetics had no clear perioperative plan, 47% had no intraoperative blood glucose recorded, and a fifth of patients did not have appropriate glucose management in the postoperative period [1].

Methods: We conducted a retrospective audit of diabetic patients presenting for elective day case surgery over a 6-week period in February and March 2019 at New Cross Hospital and Cannock Chase Hospital. We used a standard proforma and audited against the standards set out in the 2016 Joint British Diabetes Societies for Inpatient Care [2].

Results: We highlighted 35 patients across this six-week period, 91% of which were Type 2 Diabetics and 20% of which were treated with insulin. A quarter of patients did not have a formal preoperative assessment, all of which were planned local anaesthetics, and overall 83% of local anaesthetic cases were not preassessed. 37% of patients had no perioperative diabetic management plan and over half had no written information regarding their diabetic management.

Every patient had a pre-operative blood glucose measured on the day of surgery, 20% having a glucose greater than 12mmol/L and 17% less than 4 mmol/L. Only 28% of patients had an intra-operative glucose measurement recorded, despite half of the operative times being over an hour.

Only half of patients were first on the list and 22% were not in the first third of list order.

All patients fulfilled the discharge criteria of eating, drinking, mobilising and able to recommence their usual diabetic management.

Discussion: Diabetic management is vulnerable to disruption perioperatively if an appropriate individual management plan is not implemented, and there is a subset of patients listed for local anaesthesia who appear to be missing out on this. List management can be difficult and although most patients do get operated on in the morning, list position is also important and trying to minimise starvation time and give adequate recovery time post-operatively is key.

Identifying abnormal glucose results is important but we need to act upon these, particularly hypoglycaemia in those who are about to have a general anaesthetic and continuing this monitoring intraoperatively.

References

[1] *The National Confidential Enquiry into Patient Outcome and Death. Highs and Lows*. 2018. London.

[2] Joint British Diabetes Societies for Inpatient Care. *Management of adults with diabetesundergoing surgery and elective procedures: improving standards*. Revised March 2016.

Selective Spinal Anaesthesia using Hypobaric Low Dose Levobupivacaine with Fentanyl – Is it an Effective Alternative to General Anaesthesia for Outpatient Laparoscopic Procedures?

Usha Nandini; S. Rangalakshmi
Department of Anesthesia, Rajarajeswari Medical College and Hospital, Bangalore, India

Background and Aims: Day care surgery is here to stay. Anaesthesia for day care surgery is a challenge and there is pressure on the anaesthesiologist to evolve low cost, efficacious anaesthesia at the same time make the patient street fit in a few hours. With this background we evaluated clinical efficacy of 5mg hypobaric levobupivacaine alone and with 10 mcg and 25 mcg fentanyl in patients undergoing outpatient gynecological laparoscopic surgeries under subarachnoid block.

Materials and Methods: We conducted a prospective study on 90 patients of ASA I and II scheduled for laparoscopic tubectomy and diagnostic hysterolaparoscopy. The patients were randomized into three groups, group LP, LF10, LF25 receiving 0, 10, or 25 mcg fentanyl added to 5 mg levobupivacaine with sterile water (total volume 3 ml). Sub arachnoid block was given to all patients in sitting position and given anti trendelenburg position for selective spinal anesthesia. Onset time of sensory and motor block, degree of motor block, level of anaesthesia, need for supplementation and haemodynamic variables were monitored. Regression of sensory and motor block, duration of analgesia, and time for unassisted ambulation were assessed and evaluated whether the patients could bypass the PACU. The results were statistically analyzed using SPSS15, ANOVA, Chi square /Fisher exact test and p value of < 0.05 was considered clinically significant.

Results: Block onset time and intraoperative conditions were comparable in all three groups, no patient required general anaesthesia to complete surgery. Patients with shoulder tip pain were administered Inj Fentanyl IV. 56.7%, 13.3% and 6.7% required analgesic supplementation in LP, LF 10 and LF25 groups respectively. The difference was clinically significant ($P < 0.001$). Though LF25 group had significantly longer duration of analgesia ($p<0.001$)average time for unassisted ambulation remained 80-120 min in all groups and no difference was observed in Post anaesthesia discharge scoring system (PADSS) score at discharge i.e. 4-5 hrs.

Conclusion: We conclude that selective spinal anaesthesia using hypobaric levobupivaine 5mg with 25 mcg fentanyl provides excellent anaesthesia for day care gynecological laparoscopic procedures lasting less than 1 hour. Patients can be discharged at 4-5 hours with complete recovery. This is an effective and low cost alternative to general anaesthesia with fewer side effects.

Block Rooms and Nurses are Crucial to Successful Peripheral Nerve Block

Kirsti Lehtonen, RN, Nurse anesthetist, M.Sc.(Health)
Turku University Hospital, Department of Oral and Maxillofacial Diseases, Perioperative services

There are many factors affecting the successful block room team. The key factors are coordination, resourcing, good timing, a well-managed pathway of patients and the know-how. The most important thing is that there must be someone to coordinate the operation day and the block nurse team. The coordinator explores the patients' health records and their plans for the surgery and anesthesia the day before. When she/he has a picture about all the next day's nerve blocks, she/he makes a scheme for the following day. She/he makes sure that there are block room nurses available and they have enough nursing time at the bedside.

The patients are invited to the hospital early to guarantee at least one hour for the team to place the nerve blocks. Placing the nerve blocks well in advance also gives more time to become numb. Often the first patients of the day will get the nerve block in the operating room or they get some other form of anesthesia. All the next patients will get the block in one of the recovery rooms.

In the recovery room the block nurse starts the monitoring and infusion. She reviews briefly the patient's health history and the patient's suitability for regional anesthesia. The focused assessment evaluates the patient's ability to tolerate positioning for the block procedure and assures that the patient does not display any signs or symptoms of infection, particularly at the site of procedure. The patient education is a key component of the block nurse's responsibilities. The block room nurse lets the anesthesiologist know that the patient is ready for the nerve block.

Throughout the procedure, the block nurse monitors for signs of respiratory depression, hemodynamic instability as well as the patient's tolerance of the procedure. Under the direct supervision of the anesthesiologist, the nurse administers the prescribed analgesia and sedation for the procedure and monitors the effects of medication. The close monitoring of the patient during the procedure and the assistance with local anesthetic administration by the nurse allows anesthesia providers to maintain their focus on the ultrasound and correct placement of the needle.

Once the procedure is completed, the nurse then documents the critical elements of the procedure, the patient's position, method used (ultrasound and/or nerve stimulator), type and dosages of local anesthetic, medications administered, and the patient's responses to the procedure. The anesthesiologist leaves the patient in the care of the block nurse until the OR is ready. Once the block is completed, the nurse continues monitoring the patient, the level of sensory and motor blockade and looks for possible complications.

The block nurses must be familiar with monitoring and with taking care of the patient during the anesthesia. If they are not, the development of the block nurse team needs a multidisciplinary effort. The regional anesthesiologists must help to prepare nurses for their new roles. In addition to educated nurses, the whole block team the anesthesiologist included, must have good aseptic, technical and communication skills.

***Ambulatory Surgery* is the official clinical journal for the International Association for Ambulatory Surgery.**

Ambulatory Surgery provides a multidisciplinary international forum for all health professionals involved in day care surgery. The editors welcome reviews, articles, case reports, short communications and letters relating to the practice and management of ambulatory surgery.

Topics covered include basic and clinical research, surgery, anaesthesia, nursing, administrative issues, facility development, management, policy issues, reimbursement, perioperative care, patient and procedure selection, discharge criteria, home care. The Journal also publishes book reviews and a calendar of forthcoming events.

Submission of articles

All papers should be submitted by email as a Word document to one of the Editors-in-Chief.

Electronic submissions should be accompanied, on a separate page, by a declaration naming the paper and its authors, and that the paper has not published or submitted for consideration for publication elsewhere.

The same declaration signed by all authors must also be posted to the appropriate Editor-in-Chief.

Mark Skues
Email: mskues@gmail.com

Ian Jackson
Email: drijackson@tollerton.net