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Abstracts of Session 10c

Poster session

P1c

Is excision of the hernia sac needed in laparoscopic repair of indirect inguinal hernia?

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In the laparoscopic repair of indirect inguinal hernia, hernia sac is partially or completely excised in general.
From September 1997 to September 2000, laparoscopic TAPP hernioplasty have been performed for 30 consecutive patients with indirect inguinal hernia. In the first six cases, hernia sac was partially or completely excised. In the other 24 cases, hernia sac was incised but not excised. For this report the incidence of morbidity rate, recurrence and mean operative time in non-randomized consecutive patients following laparoscopic hernia repair of indirect inguinal hernia with and without excision of the hernia sac was compared.

Results	Sac excised (partially or completely)	Sac not excised
Patients	6	24
Mean age (yr)	38.4	37.6
Mean operative time (min)	128	68
Subcutaneous amphsema	1 (16.6%)	0
Seroma	4 (66.6%)	0
Urinary retention	1 (12.5%)	3(50%)
Testicular discomfort	1 (l6.6%)	0
Mean duration of hospital		
Stay (days)	1.1	0.6
Recurrence (2–36 months in follow-up period)	1(NS)	0

In spite of the fact that there had been a recurrence in one of the cases (NS, Fisher's exact test) in the group in which hernia sac was not excised; the operation period and morbidity rate was relatively less ($P < 0.05$) in this group.

P2c

Day surgery surgical hernia treatment and color-Duplex follow-up

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INTRODUCTION: The Authors describe a surgical variant of the modified Lichtenstein procedure, designed to maximally reduce the possibility for recurrency. The technique is based on the use of a polypropylene plug and mesh.
The work proceeds in the description, by means of color-Duplex imaging techniques, of the behavior of the prosthetic pillow-shaped plug and mesh with a 36-month follow-up of 50 patients who underwent surgical intervention with this procedure.
MATERIALS AND METHODS: In the 50 cases treated, we positioned a polypropylene pillow-shaped plug and a boat-shaped mesh on the internal oblique and transverse muscle and on the fascia trasversalis, 2 cm medially from the pubic tuberde and 4 cm laterally from the internal orifice of the inguinal canal. The mesh is securely anchored by a continuous suture.
Prosthetic positioning is confirmed by color-Duplex imaging which allowed us both to evaluate dimensional variations correlating to prosthetic connective tissue infiltration, and to verify correct prosthetic positioning compared to funicle and spermatic vessels.
RESULTS: From this study, we have observed that in the first post-operative day it is not possible to demonstrate either plug or mesh due to tissue edema. From the second week until 3–4 months both prostheses are well definable, while after this period they progressively less noticeable. This is due to fibroblastic tissue infiltration within the mesh network, which does not allow us to distinguish the synthetic structures that are encompassed in the surrounding tissue structures, all in favour of an increase local resistance to abdominal pressure.
CONCLUSION: The 36 month follow-up by means of color-Duplex imaging in the 50 patients who underwent this surgical procedure has allowed us to draw the following conclusions:

1. Total lack of early or late post-operative complications;
2. No recurrency at 36 months
3. Optimal fibroblast behavior in including the pillow-shaped polypropylene plug.

P3c

Mesh plug hernioplasty: outcome indicators in the day surgery setting

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OBJECTIVE: To assess the complications and quality indicators of the mesh plug technique.
METHODS: Over a three years period (1997–2000), we operated on 1115 inguinal hernia patients. 983 unilateral hernias and 132 bilateral. The mean age was 50.9 yr (range 17–89 yr) and the mean weight 74.7 kg (40–108). 1121 were men and 94 women. The anaesthetic ASA

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risk was 321 ASA I, 682 ASA II and 112 ASA III well compensated. Local anaesthesia with sedation was the standard anaesthesia technique in 982 of the patients. 1129 (90.5%) cases were primary hernias and 118 (9.5%) recurrent hernias. Surgeons and residents used the Perfix® plug. All the operations were performed at the day surgery unit. The patients are given appointments for one week, four weeks and one year later for clinical examination.
RESULTS: 1046 (93.8%) patients left the day unit within 4–6 h after surgery. The unplanned admission rate was 3.4% and 6.2% were previously planned with overnight stay. Immediate morbidity was 1.1%; the attendance rate to the emergency department was 1.1% and 6 patients need postoperative wound examination for bleeding. The one-month complication rate was 7.4%. The overall recurrence rate was 0.72%. The follow-up rate was 88.4% at one month and 64% in the first year.
CONCLUSIONS: The mesh plug technique is a safe and effective procedure highly suitable for most patients as day cases. The results are reproducible by the average surgeon. The standardisation of the anaesthesia-surgical technique improve the quality of care provided.

P4c
Varicocele persistance aferr tauber's antegrade sclerotherapy – three years of experience

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Tauber recently described the technique for varicocele antegrade sclerotherapy. The aim of this study was to present our experience with varicocele antegrade sclerotherapy.
120 dispermic patients with idiopathic varicocele were studied. Ten of this were secondary procedure after failed previous treatments done with different techniques. Preoperatively, all the patients underwent C.W. Doppler ultrasounds of the spermatic cord and semen analysis (by the same operator employing WHO Laboratory Manual 1992). All patients received a questionnaire assessing postoperative pain, satisfaction degree of the surgical procedure and resumption of normal activities. All the patients underwent a physical and a Doppler examination 1 week after the surgical procedure to evaluate the persistence of spermatic reflux.
We observed 8 reflux persistences (6,6%), all recurrence occurred in the group of patients undergoing primary treatment, while no persistence was observed after secondary treatment: 1 in grade I and type I, 3 of grade III and type I and 2 of grade III and type III. Average length of procedure was 25 min (max. 45 and min 10 min). Postoperative pain was low (0.7 in a scale 0–3) and the satisfaction index was high (24 in a scale 0–30); the average time for full recovery was 4 days. There was only a major complication: chemical orchitis caused by the sclerosing agent for a technical mistake.
In our experience, Tauber's antegrade scierotherapy is a safe technique. It is a short length procedure and causes minimal pain, high satisfaction indices and has low recurrence rate

P5c
Outpatient treatment of condyloma acuminatum

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The list of sexually transmitted diseases is lengthy, and among the many conditions condyloma acuminatum stands out and is worthy of separate consideration. Indeed, it has been considered the most common anorectal infection affecting homosexual men. It frequently causes emotional distress to patient and physician alike because of its marked tendency to recurrence. Condyloma acuminata occur more often in immunodepressed patients than in others. Condyloma acuminata continues to be a significant health problem, with 1 million new cases seen yearly. The presence of condyloma acuminatum mandates treatment. Many methods of treating condylomata has been employed, all with a high incidence of recurrence. At the I Surgical Clinic, University of Turin, from September 1999 to October 2000, 84 patients (pts.) (50 M/34 F) were treated surgically for anal condyloma acuminatum. Their mean age was 36 yr. 81 pts. were treated as an outpatient procedure; while 3 pts (1 drug addict and 2 HIV pts. with a complete anal substitution by lesions) were submitted to surgery in operating room. Associated sexually transmitted diseases were HIV in 5 pts, HBV or HCV in 4 pts and a soft ulcer in 1 case. Regarding sexual habits, we observed 67 eterosexual pts.; 15 homosexual and 2 bisexuals. In 20 pts. was performed a prior treatment (medical in 6 and surgical in 14). Symptoms were pruritus in 62 pts; bleeding in 39 pts.; rarely itching, anal wetness was observed. The localization of condiloma was perianal in 74 pts; endoanal in 46 pts and associated genital in 18 pts. Patients were treated with diathermocoagulation in 30 cases and with a complete surgical excision in 54 cases. 81 pts (96.5%), as referred were treated as outpatient procedure. In 2 cases of these was necessary a two step procedure for a complete substitution of anal canal by lesions. We observed 1 postop, hemorrhage. No others complications were observed. Regarding recurrences, we observed 6 recurrences after DTC (20%) and 12 after surgical excision (22%). In conclusion, we consider the outpatient surgical treatment of condilomata feasible and radical. It permits an early therapy without the major problems of an admission to the hospital with the risk of transmission between patients.

P6c
Report of 100 cases with proctological pathology in night staying patients

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The present work had the purpose to demonstrate the case analysis of 100 patients with Proctological Pathology (Haemorrhoids, Fissures and Fistulas), operated during the year 2000, in the regimen of a night stay in the hospital.
An evaluation was made from the following parameters from each patient: sex, age, residence, profession, origin, time of waiting for the first consultation, time of waiting for the surgery, pathological antecedents, surgical antecedents, time and type of symptoms, and degree of work missing.In terms of surgical procedure, it was analysed the type and median duration as well as the type of anaesthesia used.
On the post-surgery, the main complications and the degree of pain referred by the patient were analysed.
All patients were discharged from the hospital the morning after the surgery and no major problems were referred.
The number of consultations, time of follow-up and the rate of complications were also analysed.
The authors present the results of a telephone inquiry where it was evaluated the presence of complications and the post-surgical pain degree, the inability period for labour, the quality of attendance and the satisfaction degree of the surgical patient.
The conclusions of the study are based on the results obtained, mainly the early and late complications and the rate of recurrence.

P7c
Gynaecological ambulatory surgery unit: results

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1974 surgical procedures took place in our Gynaecology Service from July 1994, date of our Gynaecological Ambulatory Surgery establishment, until 2000. 1280 of them were with hospital admittance (65%). 568 in the Ambulatory Surgery Unit, and 126 in minor surgery (6%). During this period of time, we made the 8% of the 6941 procedures developed in the Hospital General Ambulatory Surgery Unit.
Our most frequent procedures were histeroscopy (203, 35%), laparoscopy (133, 35%), breast surgery (98, 17%), diathermic loop (45, 8%) and vulvar tumors (31, 5%). Quality control was made by satisfaction questionnaire, reception of phone calls (72, 13%), annulations (3, 0.5%), admittance (22, 4%), and re-admittance 4(0.7%). We have increased from 11% up to 40% of Ambulatory Surgery in our procedures, without any change in the complexity of our surgery. This fact has caused a significant decrease in the hospitalisation rate, so our waiting list for gynecological surgery has also decreased, and our productivity has increased.

P8c
The gynecological ambulatory surgery in Catalonia

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The Workgroup in Ambulatory from The Catalonian Obstetrics and Gonaecology Society

In November 1998, the Workgroup in Ambulatory Surgery stared to work, supported by The Catalonian Obstetrics and Gynaecology Society. Our objectives were (1) to know the real situation of this surgical procedure in Barcelona; (2) to define concepts and to establish protocols; (3) to show these activities and to try to get the figures from all over Catalonia; (4) to extend the objectives to the whole country, asking for the support of the Spanish Obstetrics and Gynaecology Society.
After some meetings with delegates from the four catalonian counties with experience in Ambulatory Surgery, we were able to offer all the statistic figures in our community, with 6.12 million people and 67 hospitals studied. We realized that 44 hospitals were performing Ambulatory Surgery (66%), and 27 Gynaecological Ambulatory Surgery (40%), and it was also practised in 5 private centers. Further conclusions are exposed in our communication.

P9c
Use of various concentrations for low doses of prilocaine in ambulatory proctology and surgery of the perineum

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Ambulatory surgery for proctology requires deep intra-operative anesthesia and post-operative pain control as well as prompt recovery. Dural block with prilocaine is a good choice as its pharmacological characteristics make it an effective and easy drug to use.
Sixty patients undergoing ambulatory proctological and perineum surgery were divided into two groups:
Group I: Dural block with 25 mg prilocaine 2% + local infiltration.
Group II: Dural block with 25 mg prilocaine 5% + local infiltration.
Dural puncture was performed on the sitting position between L5 and S1 and this position was maintained for five minutes. Later, the patient was placed on the neutral lithotomy position.
Demographic variables and hemodynamic changes were studied as well as the level of motor and sensorial block, when the first analgesic was given, when motor activity functions returned, when the patients could walk, when he has discharged as well as patient satisfaction during the whole process, was recorded.
There was no significant difference between the two groups although group I showed earlier return of motor functions standing with help during the immediate post-operative period) and a higher degree of comfort, probably because motor block is less intense in this group. Both techniques are useful in certain procedures and hospital stay was always under 5 h.

P10c
Gynecologic procedures in ambulatory surgery units. Results of a multicentral survey in Catalunya (Spain)

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A survey was sent to all private centers in the province of Barcelona that had a gynaecological department. We asked which centers had ambulatory units and which gynecologic procedures were performed. 23 of 43 centers province of BCN informed that they had AS Unit, but only 12 gave details of each procedure. Not all units began in the same year, the first was Viladecans Hospital in 1990, and 15 of 23 opened between 1997 and 1999. We only considered the procedures that had been performed since 1997 in the 12 centers whom had completed the dates. Between 1997 and 1999, 4202 gynaecological surgical procedures were done: Breast excision of fibroadenomas, tumorectomies, exc of papilomas(445)//Vulva-Vagina:excision of nodules, vaginal septum, vulvar fistula, Bartholin cyst(313)//Cone byopsi of the cervix (diatermic handle,cold knife,..)(465)//SurgicalHisteroscopy:polipectomy, myomectomy, endometrial ablation, asherman syndrome (1167)//Obstetric curettage, dilatation and curettage(267)//Diagnostic lanaroscopy (195V//Tubal sterelization by laparoscopy (1010)//Major laparoscopy surgery (cystectomies, ooforectomies,..)(340). Also, we evaluated the results of Tarragona Lleida and Girona. Ambulatory surgery is a well accepted procedure for a great number of gynecologic procedures without an increase of surgical morbidity.

P11c
The economical advantage of outpatient versus inpatient for laparoscopic sterilisation

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INTRODUCTION: One of the reasons for the development and the success of Ambulatory Surgery all over the world is the economical

impact of day surgery in the Health Care System. The aim of this study is to evaluate the costs of both outpatient and inpatient laparoscopic sterilisation, and to establish the cost difference between the two systems.
METHODS: The laparoscopic sterilisation is still a surgery done at our hospital as an ordinary hospitalisation in patients that could have been selected for day basis procedure. This prospective study included 24 patients, ASA I, proposed for that surgery. They were assigned to two groups, 12 patients each, according to the system used: day surgery (DS) basis versus ordinary hospitalisation (OH). All the direct costs were estimated, mean surgical time were recorded and comparisons with the values established by the Portugnese Financial Health System for these DRG (Diagnosis Related Groups) were made.
RESULTS: All patients were submitted to the surgery proposed by similar general anaesthesia. No major complications were recorded. All patients of the group DS went home on the same day of surgery. None of them needed to be admitted or readmitted during the 30 days after surgery. One patient of the group OH had to wait 4 days for the surgery owing to problems on the surgical schedule. None had to be readmitted. The values are in Euros.

Group	Mean surgical time (min)	Mean stay (days)	Total cost (A)	DRG price (B)	(B)–(A)
DS	26,75[a]	1.0	35781	64844	+29063
OH	45,42	2.8	951,03	918,79	−32,24

[a] $P < 0.001$ (Mann–Whitney test).At our hospital, the cost savings of laparoscopic sterilisation when done as a DS are greater than 35% when compared to OH.
CONCLUSIONS: Besides other advantages, there is no doubt from our study that there are significant economical benefits when DS is developed more efficiency (less surgical time statistically significant) and total costs savings.

P12c
Duration of hospitalisation in laparoscopic splenectomy: 1 day

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When splenectomy was applied laparoscopically the patient is comfortable postoperatively, especially the duration of hospitalisation is short. This study was done and evaluated in 13 patients who have gone through laparoscopic splenectomy between the dates of March 1998 and November 2000. Nine of the patients were female, 4 were male and the average age was 38.8 (19–60). The rate of conversion was 25% (3/12) and the reasons for this is our coming across with 2 patients with massive splenomegaly bleeding, in 1 patient undetermined splenic artery aneurism in ultrasonography preoperatively.
In cases that have gone through laparoscopic splenectomy the spleen pathology; in 7 cases had ITP, in 1 case spleen hemangioma, in one case spleen cyst. In 2 patients with ITP accessory spleens determined and excised. The average spleen weight was 139 g (62–182 g), the duration of surgery was 106 min (90–240 min). In the fist 3 cases average 1.75 units (1–2 units) of blood transfusion was done. In the last 6 cases blood transfusion was unnecessary. The average hospitalisation period was 2.3 days (1–4 days), the hospitalisation period of the last 2 patients was 1 day. The benefit of the patients with ITP from splenectomy was found as 85.7% (1/7).
We belive that because the hospitalisation duration in laparoscopic splenectomy is short and the postoperative comfort of patients is good, it should be preferred to open surgery in suitable cases.

P13c
VAS pain ratings at home after paediatric tonsillectomy

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Tonsillectomy is known to have a very painful postoperative period. Since 4 yr, we are performing tonsillectomy in children as a day surgery procedure at the ENT department, Danderyds hospita1/Karolinska hospital, Stockholm, Sweden. The day surgery procedure has stimulated us to improve the care of these children while in hospital, but it has also stimulated our concerns about how the children are doing at home after surgery. To be able to evaluate with the purpose to reduce pain at home an instrument to measure pain at home is essential. The purpose of the present study was to evaluate the use of pain evaluation scales in at home after tonsillectomy. Two types of scales were used; one with faces for children 3–7 yr old, and a VAS scale with numbers for older children. 18 children were included. Pain was measured 3 times daily with one measurement before taking an analgesic drug and one measurement 1 h later. Additionally, a questionnaire including questions about i.e. eating, drinking and playing activities was completed daily by the parents. Questionnaires and pain evaluation scales were returned at a postoperative control visit 8–10 days after surgery when children and parents were also interviewed by the responsible nurse. The reliability of the pain scale results was evaluated by comparing it with the information obtained from the questionnaires and interviews. Preliminary results show that pain scales for children are a useful tool for measuring their experience of pain at home after tonsillectomy, that they give a reliable information of the effects of analgesic drugs and that a simplified protocol with only one measurement daily gives sufficient information.

P14c
Tonsillectomy in day-surgery using bipolar diathermy scissors

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To facilitate the recovery of patients after tonsillectomy in a day surgery unit short operation time, limited blood loss and small risk for primary postoperative hemorrhages are of great value. In 1998, bipolar diathermy scissors was introduced at the ENT Department, Danderyds hospital as a new technique for tonsillectomy in order to simplify the surgical procedure, joining two mechanisms, diathermy and scissors into one instrument to reduce time of surgery and to reduce per-operative hemorrhage. Since then more than 800 tonsillectomies has been performed using this technique, including both children and adult patients. In this retrospective study operating time and intraoperative bleeding was compared in groups of patients after tonsillectomy using bipolar diathermy scissors and after tonsillectomy using conventional technique at the same unit. The patients included in this study were three groups of children from 3 to 12 yr of age and one group of adult patients. Either tonsillectomy (T) or tonsillectomy and adenoidectomy (TIA) were performed. The results show a significant decrease in operating time as well as peroperative hemorrhages and a very low frequency of primary hemorrhages.

P15c
Anesthesiology evaluation in saphenous vein stripping: intraoperative and postoperative complications

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The lower extremity revascularization is an important part of the ambulatory surgery (AS). This surgery represents the 3.7% of AS programs in our hospital. The aim of this study was the descriptive analysis of anesthetic techniques and the intra and postoperative complications in 76 cases of saphenous vein stripping. METHODS: A 4 yr retrospective study was made. The statistical data analysis was performed with Statview 5.0 sofware. *Results:* The distribution of the patients was as follows: 13 were male (6.6%) and 63 women (83.3%) aged 49,5 $\pm$ 13,7 yr. ASA risk was: ASA I 58 patients (76, 36%), ASA II 16 (21, 5%) and ASA III 2 (2, 63%). The anesthetic techniques used were: 3 cases with epidural anaesthesia (3, 95%), 6 (7, 89%) general anaesthesia, 31(40, 7%) spinal anaesthesia and 36 (47, 3%) monitored anaesthesia care with sedation. Maintenance anesthetic drugs were: Bupivacaine in 28 patients, Mepivacine in 37,
Lidocaine in 4, Prilocaine in 1, Propofol in 1, Sevofluorane in 2, Desfluorane in 1 and Forane in 2.
Abstracts should contain no more than 300 words, including title, autor(s), country. Only a case of severe hypotension were detected such as intraoperative complications. The postoperative complications were: urinary retention in 2 patients (2, 7%) and local hematoma in surgical site in 2 patients (2, 7%). CONCLUSIONS: The preoperative selection of patients with venousdisease in AS reduces the number of intra and postoperative Brief description of the methods and procedures complications. The postoperative complications were independent of anesthetic techniques used.

P16c
New instrument for phiebectomy: the saw-knife

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PURPOSE: This study was designed to evaluate the results of a 25 yr ago introduced form of varicectomy by the saw-knife technique.
PATIENTS and methods: 2976 limbs were operated on with primary or postthrombotic long and short saphenous and perforating vein varicosities displaying saphenofemoral or saphenopopliteal junctional insufficiencies underwent operation in the period of the last 25 yr. 478 limbs had recent or healed crural ulcer. Surgeries were performed with the use of saw-knife phlebectomy in conjunction with intralurninal stripping of greater or lesser saphenous trunks and cross-ectomy. The saw knife consists of three parts: the blade is 3 cm long with saw teeth on one side, the handle is 10 cm long and between the former two parts is a 10 cm long, narrow shaft.
RESULTS: In the 2976 procedures performed, there were in every case suffusions disappearing within 4 weeks and 7% disesthesias diappearing within 3 months. Postoperative morbidity was non-existent, permitting all patients to walk following the disappearance the effect of the anaesthetics. The duration of the operation of a limb was between 25 and 72 (mean 41) min.
CONCLUSIONS: Saw-knife phlebectomy of varicose and incompetent perforating veins is easy and fast to perform and has very encouraging late results. This is an excellent method of varicose vein removal, eliminates the need for many incisions and stiches along the limb, suitable for cosmetic varicectomy in postthrombotic and postphlebitic limbs as well.

P17c
Regional anesthesia in shoulder arthroscopic surgery in day hospital

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In our institute arthrosoopic orthopaedic surgery is performed exclusively in the operating rooms reserved for day surgery. The evolution of endoscopic techniques and low impact anaesthesiology permit treating shoulder pathologies in a Day Hospital regime. In our DHC da quando é stato aperto nel giugno 1997 al marzo u.s. sono stati effettuati 836 interventi di attrosocpia di spalla. Ii 40% in DH puro ed il 60% in ricovero. In questo 60% sono compresi pz. che vengono da altre regioni, che per patologie associate richiedono monitoraggio per 24h, pz. Con motivi sociali.
II nostro obiettivo flituro é raggiungere l' 80% degli interventi in regime di DH. Per questo é fondamentale la scelta e la preparazione del pz ed il 1°step per raggiungere tale obiettivo é la visita anestesiologica; il 2°step é rappresentato da una stretta collahorazione tra l'equipe chirurgica ed anestesiologica.
La tipologia degli interventi riguarda tutta la patologia della spalla che trovat indicazione nella teenica a cielo chiuso.
L'anestesia di prima scelta é Ia locc-regionale ed in particolare il blocco del plesso brachiale per via interscalenica, il 58% degli interventi e stato eseguito in ALR pura, il 40% in ALR a cut é stata associata'ma sedazione (+ 1 profonda) 1'1.2% AG.
Le complicanze anestesiologiche nel postoperatorlo sono state assenti e solo 6 pz programmati in DH sono PO1 stati ricoverati per motivt ortopedici.
Per il controllo del dolore a domiciho nelle prime 24–48 ore abbiamo messo a punto un protocollo con tramadolo e ketorolac per Os che garantisce un buon controllo antalgico.
Complessivamente abbiamo registrato im alto grado di soddisfazione, sia per il risultato chirurgico che per il trattatnento anestesiologico, convalidato da questionari di soddislizione compilati dai malati
La nostra esperienza Si e' finora rivelata positiva non solo in virtu della teenica chirgica e di'ma corretta selezione del pz ma anche grazie alla stretta collaborazione chirurg anestesista e da un approccio anestesiologico adeguato tale da consentire una minimizzazione degli effetti collaterali e dello stress chirurgico.

P18c
Day case open reconstruction of acromio-clavicular joint dislocation

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Acromio-clavicular (AC) joint dislocation is typically an injury occurring in young fit patients. Operative repair may be considered in symptomatic grade three injuries. At less than six weeks post injury, an open coraco-clavicular reconstruction may be performed using PDS cord, whilst for later reconstruction this repair is augmented with a coraco-acromial ligament transfer (modified Weaver-Dunne procedure). We proposed that this can be performed on an ambulatory basis. We reviewed fourteen patients who underwent open reconstruction of AC joint dislocation in the Day Surgery Unit of a District General Hospital. In all cases general anaesthesia was supplemented with an interscalene nerve block. Patients were discharged with adequate oral analgesia, and an education sheet. Operative and anaesthetic complications as well as patient satisfaction were assessed. All patients were discharged home uneventfully on the day of surgery.

There were no complications relating to the surgery or anaesthesia and there were no re-admissions for pain control. All patients expressed satisfaction with day case management of their injury. Open reconstruction of AC joint dislocation using PDS cord can successfully be performed on an ambulatory basis under general anaesthesia with interscalene nerve block.

P19c
Artroscopic acromionplasty in out-patients by using a modified parascalemc block

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In 1994, in order to overcome side-effects and complications in traditional Dalens tecnique for the brachial plexus anaesthetic block in our open or arthroscopic shoulder surgery, we perfected a different approch to the plexus modifing the needle directions and contact points for injection of anaesthetic. Aim of the study is to evaluate our prelyminary results in arthroscopic acromionplasty in out-patients by using this anaesthesiologic tecnique.
MATERIALS AND METHODS: The patient is placed in a decubitus supine position with the head turned counterlaterally to the side to be blocked. The cutaneous access point is localized at the meeting-pont of a straight line between the lower margin of the cricoid cartilage and the Chassignac tuberde with the lateral margin of the strnocleidomastoid muscle. A Teflon needle of 25 G, length 35 mm, connected to elecrostimuletors, is inserted at an angle of 150 in respect of the cutaneos surface and directed towards the third medium of the clavicle. We locate the clones in the antero-medial section of the shoulder at the depth of 20 mm. The needle is then directed laterally to find the clones in the posterolateral section and those relating to the sovrascapular nerve, outside of the plexus sheath, but affecting the shoulder innervation. 5 ml. of ananaesthetic mixture (bupivacaina and mepivacaina), are injected for each of the clones located. During the operation we monitorized by ECG, blood pressure and p02. We performed more than 100 open or arthroscopic operations. We report here only the arthroscopic acromionplasties.
RESULTS: All the patients were evaluated by using the U.C.L.A. shoulder rating scale, before surgery and at the last clinical evaluation (mean follow-up: 22,4 months), we obtain the 88% of excellent or good result. Furthermore, we assessed the patients with an anaesthesiological chart, classifing the results and the complications. From a subjective point of view, they were contacted, again, to fill a thelephonic questionaire in order anaesthesiological and surgical compliance.
CONCLUSIONS: Our experience with parascalenic block has provided us with further procedures, which permits a more reliable approach in shoulder surgery. Our results have encouraged us to keep on treating patients by day surgery.

P20c
Day case thyroid surgery: safe, feasible, and appropriate in selected cases

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INTRODUCTION: Although many operations are increasingly performed as day cases, thyroid surgery has traditionally been considered an in-patient procedure in order to reduce potential morbidity and mortality arising from complications such as airway obstruction, haemorrhage, and hypocalcaemia.
PURPOSE of paper: This pilot study was designed to assess the safety and feasibility of thyroidectomy with discharge of the patient the same day, and with a view to performing a larger prospective study at a later stage to further assess cost savings.
METHODS AND PROCEDURES: Eight patients were prospectively selected for day surgery, according to patient age, anticipated operation, absence of significant co-morbidity, and presence of appropriate social and home circumstances. All operations were carried out under general anaesthesia by one surgeon with an endocrine interest between July 1998 and June 2000. All procedures were carried out in the day unit before midday, and each patient was required to remain in the department for six hours post-operatively. Patients were reviewed by the surgeon in person prior to discharge from hospital, and again routinely four weeks after surgery.
RESULTS AND CONCLUSION: All eight operations scheduled for day surgery were successfully accomplished without the need for overnight admission to hospital. There were no deaths and no complications, either immediately following surgery, or at review four weeks after surgery. All patients reported satisfaction with having their operation performed as a day case procedure. We conclude that day case thyroid surgery is safe, feasible, and appropriate in selected cases, and, in view of reduced overnight occupancy of hospital beds, also likely to present significant hospital cost savings.

P21c
Optimising pain relief following oral day case surgery

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INTRODUCTION: Surgical removal of impacted third molar teeth results in post-operative pain and swelling, sometimes with severe discomfort and significant patient morbidity, complicating successful ambulatory surgery.
METHODS: 50 adult patients attending for bilateral mandibular third molar removal under day case general anaesthesia were therefore recruited into a pilot study to characterise the effectiveness of different post-operative analgesic regimes.
Following standardised anaesthetic and surgical protocols, patients were randomised into 5 different study groups Group 1 received both pre-op Voltarol and pre-op LA block, Group 2 pre-op LA + post-op Voltarol, Group 3 post-op LA + post-op Voltarol, Group 4 post-op LA only, and Group 5 pre-op Voltarol only.
Visual Analogue Scale (VAS) pain scores and lip numbness scores (to confirm LA efficacy) were recorded pre-operatively (baseline) and at 30 minute intervals for 2 h post-surgery, as was the use of and time to first dose of available'escape analgesia'. A 24-h post-operative pain score was assessed by telephone.
RESULTS AND CONCLUSIONS: Results will be presented to illustrate the sequential VAS pain scores, and the requirements for 'escape analgesia' in each group, thus comparing the efficacy of the 5 different analgesic regimes. Recommendations will be made regarding the 'best choice' analgesic regime for thirrd molar day surgery, as well as suggestions for future research.

P22c
The advantages of a combined pediatric surgical and pediatric day-care clinic: experiences with a new concept in the northwest region of Switzerland

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The first pediatric day-care clinic was established in Liestal (BL) in

1995. It combines surgical and medical services, which filled a neglected gap between pediatricians, general practitioners and the Children's Hospital. The results have been positive in many respects, especially in terms of the quality of life for the patients, the acceptance and contentment of the parents.
There have been negative aspects that have been encountered since its conception. These include the reimbursement and financial difficulties, which have been imposed by the Health Insurance Companies and Governmental regulations.
More than 60% of today's surgical procedures requiring anesthesia are performed in day-care facilities. These include severe cases involving primary and secondary reconstructive procedures on male genitalia both of which are performed routinely in our Clinic on patients from home and abroad in collaboration with the Children's Hospital of Philadelphia, KTK offers two distinctive medical services: (1) extensive diagnostic examinations collaborating with pediatric surgeons and radiologists; (2) emergency medicine (i.e., infants who require i.v. medications).
The average day-care hours correspond to 1.9 days compared to 5.5 days in pediatric hospitals for the same group of patients.
This type of day-care center would be able to optimize the expenses for medical care provided that it is an integral part of a regional governmental health care plan.
KTK is a novel service for children who would otherwise be hospitalized in a regional Medical facility. Pediatric health care of the future has to be constructed on three pillars: (1) pediatricians and practitioners (2) children's day-care clinics, and (3) university and regional hospitals. A successful integration will provide an optimal model for continuous medical education and clinical research.

P23c
The impact of ambulatory care on the cost and clinical effectiveness of a cataract service

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BACKGROUND: Current government guidelines in the UK encourage healthcare organisations to explore and implement cataract services that will enhance quality patient care.
AIM: We aim to determine whether moving a cataract service from a main hospital site to an ambulatory centre improved the cost and clinical effectiveness of patient management.
METHOD: In July 1999, the cataract service in a district general hospital was redesigned. Patients referred by their primary care physician to the hospital eye clinic with cataract were seen by an ophthalmologist who confirmed the diagnosis. On the same day patients were seen in the ambulatory centre where pre-operative assessment was conducted and an admission date for surgery was booked. Within the centre patients were exposed to multiskilled nursing staff from pre-operative assessment, through surgery, to discharge. The primary outcome measure was the extra cost incurred in managing patients that stayed overnight following surgery during a 16 month period before (March 1998–June 1999) and after (July 1999–October 2000) reorganisation of cataract service.
RESULTS: Significantly more patients were managed as in-patients following cataract surgery in the main hospital (284/1362; 21%) than in the ambulatory centre (110/1217; 9%) ($x^2 = 69$, df = 1, $P < 0.001$). The total extra cost incurred by treating patients that stayed overnight was £71,852 ($100,593) in the main hospital and £27,830 ($38,962) in the ambulatory centre. Therefore, the extra average cost per patient managed was £53 ($74) in the main hospital and £23 ($32) in the ambulatory centre.
CONCLUSION/DISCUSSION: Our results suggest that changing cataract service practice from a traditional hospital environment to a dedicated ambulatory centre is more cost effective. We suspect that further cost savings have occurred since redesigning the service as more cataract operations are being penformed under topical anaesthesia and the first day post-operative review is omitted for the majority of uncomplicated cataract procedures. The ambulatory centre provided easier access for patients in an environment that had a streamlined care delivery system. We aim to improve our service further by introducing direct booked admissions for patients referred by their optometrist and running dual theatre sessions that would result in increased patient throughput and reduced waiting times for surgery.

P24c
Bone regeneration with β-tricalcium-phosphate (β-TCP). Experience gleaned from 3 years' use of β-TCP in hand- and foot surgery

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An overview of the problem.
As a synthetic-anorganic compound, β-TCP is a class II bone replacement material. It is a calcium phosphate compound that is completely soluble in organic tissue as β-tricalcium-phosphate. No evidence of side effects such as immunological reactions, giant cell reactions or macrophage formation has so far been reported. In addition to the potential use of bone regeneration in the management of bon tumours an fractures, the possible use of p-TCP (Cerasorb®) in the treatment of cystic bone with inflammatory changes in rheumatoid arthritis is also under discussion.
MATERIALS/METHODS/RESULTS: Citing case examples, the use of β-TCP in patients with inflammatory, rheumatic joint diseases, traumatic patients and patients with bone tumors in hand- and foot surgery is presented. Human histologies show simultaneous bone regeneration with increasing dissolution of β-TCP.
CONCLUSION: β-TCP (Cerasorb®) is suitable for bone regeneration under relatively difficult baseline conditions also in terms of bone structure in patients presenting with rheumatoid arthritis. In this way, additional surgery such as iliac crest osteotomy or bone regeneration with a limited supply of autologous cancellous bone can be prevented.

P25c
Day surgery in neurosurgery – our experience

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INTRODUCTION: As in other surgical fields, the department of neurosurgery has started day surgery. They proposed to our Day Unit Surgery (DSU) the beginning of lumbar discal hernia and craneoplasty surgery. The aim of our study is to evaluate the quality of these new procedures at our DSU.
METHODS: Besides the anaesthetic criteria for our patient selection, for these surgeries the neurosurgical team select the following situation: (a) acute lumbar discal hernia, non foramina or non-extraforamina, without any other spinal diseases or previous spinal surgery (b) non complex craneoplasty (without orbital or sinus involvement and without dural laceration). In this study we include the entire patient submitted in our DSU for these kind of surgery. The craneoplasty surgery use titanium screws and plats, and for lumbar discal hernia

we use the normal surgical technique. We evaluate the following parameters: postoperative pain, complication (bleeding, nausea/vomiting, new neurological deficits), discharge and readmission. We also ask patient about their satisfaction with day case surgery.

RESULTS: No major complications were recorded and all the patients were discharge home. We only have one readmission (dural fistula). The postoperative pain were equal or below of 3 in VAS. The patients were generally very satisfied.

CONCLUSIONS: In selected patient, by anaesthetic and neurosurgical criteria, the lumbar discal hernia and craneoplasty surgery seems to be adequate as day case surgery.