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TAP (transversus abdominis plane) block as an adjunct to general anaesthesia for excellent post-operative pain relief

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Background

Ultrasound guided– Bilateral Dual TAP block has been recently described and this combines the classical and oblique sub-costal TAP blocks in order to provide wider bilateral analgesic coverage. We included this nerve block as an adjunct to General Anesthesia for the acute post operative pain for day care laparoscopic cholecystectomy surgeries. Aim: To study the effect of TAP Block in a case series of 60 consecutive cases who underwent elective laparoscopic cholecystectomy at a day surgery centre.

Methods & Materials

60 patients who underwent elective laparoscopic surgeries were included in the series. All 60 patients received balanced general anesthesia for the surgical procedure. Ultrasound (Sonosite M-Turbo) guided bilateral dual TAP Block was performed using 2mg/kg of 0.5% Bupivacaine diluted to 80 ml with normal saline; was given after surgical procedure, prior to extubation.

Results

59 patients recorded a pain score of less than 3/10 on VAS in the first 24 hours. One patient experienced pain, score of more than 5/10 on VAS. In this patient it was difficult to identify the layers to do the TAP block post procedure because of gas insufflation in the wrong plane. Of the 60, 4 patients were supplemented with parenteral fentanyl (0.5 microgram /kg) for referred right shoulder pain. The average time for ambulation and discharge was 3.97 hours and 6.17 hours respectively.

Conclusion

In conclusion BD TAP Block makes the patient pain free and enables early discharge. We recommend this technique as an adjunct to General Anesthesia for Ambulatory Laparoscopic Cholecystectomy surgeries.

Ambulatory Surgery in the Dental Office: from Horace Wells to now the European Standards

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Dentistry and anesthesia have a shared history, sometimes chaotic, but also filled with accomplishments that have set standards in ambulatory surgery. Modern mouth rehabilitation techniques work wonders for our patients, offering esthetics, comfort and proper function. Surgical procedures may induce pain and anxiety. Pain is delt with local and regional anaesthesia ; while conscious sedation techniques offer proper patient anxiety management for those longer and more complex surgical steps. One sedative technique stands out for our activity as oral surgeons and implantologists : intravenous sedation using a single-drug. Midazolam is the gold standard but Diazepam, although an older benzodiazepine still has indications. The advantages of the technique are numerous : ease of use, remarkable safety, comfort for staff and

patient, and tremendous acceptance. Patient selection is the cornerstone of successful sedation techniques. The IV sedation technique requires a specific monitoring, venipuncture, drug administration and titration. Requirements involving training, in-office equipment, patient information and consent will be described, and a comparison between Midazolam and Diazepam regarding effectiveness and influence on vital signs will be shared. Data gathered from patients after surgery shows the exceptional acceptance of this sedative technique. Satisfaction is shared by patient and practitioner. The actual trend is to favor those simple and safe single-drug techniques, and to comply with the proper definition of conscious sedation : permanent response to verbal command, and maintenance of all protective reflexes.

Day-case laparoscopic cholecystectomy, room for improvement: A Single Centre Experience

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Introduction

Laparoscopic cholecystectomy (LC) is the surgical treatment of choice for symptomatic gallstones. The NHS innovation drive is to perform 60% of all elective laparoscopic cholecystectomies as day-cases.

Methods

A retrospective data analysis was performed for all day-case LC in a single institution between January 2009 and December 2011. Causes of failed discharges, post-operative complications and readmission rates were recorded.

Results

A total of 476 patients were listed as day-cases. 348 patients (73%) were discharged the same day. 128 patients (27%) were admitted, of these: 89 (69.5%) were discharged within 24 hours and 21 (16%) were discharged within 2 days. 39 of failed

discharges were due to pain (30%), 6 due to nausea & vomiting (5%), 55 due to other reasons (43%) and the remaining 28 due to combined symptoms. All 15 patients who had a drain inserted with no clear indication, stayed overnight ($p < 0.001$). 30/31 patients, with operations longer than 2 hours, failed same day discharge ($p < 0.001$). Our overall rates for complications, conversion to open and readmission were 3.1%, 1.5% and 1.7% respectively with no mortality. Our day-case rate doubled from 22% in 2009 to 50% in 2010, then plateaued at 48% in 2011 as more emergency cases are currently being performed.

Conclusion

Day-case laparoscopic Cholecystectomy is a feasible and safe treatment for symptomatic gallstones. Patients should be listed on a morning list and drain insertion avoided whenever possible, with robust protocols for management of post-operative pain and vomiting.

Drug-induced sleep endoscopy, a useful method for the diagnosis of sleep-related breathing disorders

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Drug-induced sleep endoscopy (DISE) offers a unique evaluation of the upper airway during sleep. After pharmacologic induction of sedation, it is possible to evaluate endoscopically the structures of the upper airway, and also possible to visualize the site, the forme and the size of the obstruction and the site of the soft tissue vibration.

The author describes the exact indication and a self modified indication list of the sleep endoscopy, and the VOTE classification

system, what is a very simple and easy-to-use method for reporting of DISE findings.

The drug-induced sleep endoscopy can help us to find the correct and individualized therapy for the patients suffering from snoring and sleep-related breathing disorders.

The presentation also includes of the DISE technique, and the results of the author's 40 own cases.

Ambulatory surgery – Ethic and Professional Aspects

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Analysed the cases and the existent low in Romania, I try to define the type of the surgical diseases and their surgical treatment which we can perform in fullness safety in ambulator practice. So, we can discuss about the limiting criterias and the possibilities of extend the ambulatory surgical tratment. In ambulatory „Praxis Surgery and Phlebology Dr. Cadariu Florentina” I have treated a number of cases with medico-legal problems. This paper presents the diagnostic and terapeuticals

aspects of these cases, emphasiseing those which need hospitalisation for a corect and safety surgical treatment. A good colaboration between the surgeons from ambulator and hospital is an esential condition to avoid the medical legal prolems in ambulatory surgery. This should impose the legality of the contract of medical asistance of the ambulatory surgens by the surgical clinic of the hospital, this protocol allow the patient hospitalisation in case of necessity due to a complication or urgent treatment.

Venous malformation – Surgical Treatment in One Day Surgery”

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In this paper we present two clinical cases of venous malformations to young women:

- A patient with venous aneurism of superficial jugular vein,
- A patient with venous angiom of superior lip.

Both venous malformations were resected. Difficulty of surgical interventions consists on esthetical maters. The postoperative evolution was very good, with excellent esthetic results.

Romanian Ambulatory Surgery

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In Romania the surgical activities develop in 3 directions in public hospitals and in a few private units:

- the patients hospitalized more than 12 hours as continued hospitalization are hospitalized in a regular department and registered using the DRG system with CIM 10 OMS (World Health Organization);
- the patients hospitalized less than 12 hours as day hospitalization and registered using pay services system;
- the patients registered as ambulatory outpatients.

As difficulties for day surgery development we can refer to the inexistence of standard medical packet at national level, the problems in post operator care after day surgery, and the

ambulatory surgical treatment does not pas “the time test” – some of them are made for profit and the results in unsure for patients in the future. The perspectives of ambulatory surgery in Romania are very good because it responds to economical problems of our society. The increase of day-surgery operations leads to obtaining economies for insurance companies as well as for the hospitals. So, the public hospitals services discovered the possibility to perform more operations and to receive more money from the insurance companies over the established number of “conventional” patients. The Romanian Society of Ambulatory Surgery plays an important role in the development and future evolution of ambulatory and day surgery in Romania, its work in clinical and theoretical field helps to improve management and legislative measures.

Dual Incision Laparoscopic Cholecystectomy – experience in a single centre

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Introduction

While Single Incision Laparoscopic Cholecystectomy (SILC) has been reported & advocated lately, the technique is sparsely applied in most centres. Dual-Incision Laparoscopic Cholecystectomy (DILC) has been implemented in Pok Oi Hospital (POH) since 2010 for day-to-day practice using ordinary laparoscopic instruments - a 10mm laparoscope and two juxta-umbilical 3mm ports via the same sub-umbilical incision, plus a sub-xiphoid 5mm port for operation.

Method

This was a retrospective case series including all patients receiving DILC from January 2010 to December 2011. The results were compared with that of the 4-ports conventional laparoscopic cholecystectomy (CLC) performed in 2009.

Result

96 patients successfully underwent DILC during the study period for symptomatic gallstone (n=69), gallbladder polyp (n=12), biliary pancreatitis (n=4), cholangitis (n=7) and previous cholecystitis (n=4). 3 patients required an additional port to aid dissection without conversion. The mean operating time was 75.9 minutes (SD 26min) for DILC, compared to 60.5 minutes (SD 20min) (p=0.01) for CLC. There was no significant difference in operating time (74.6 vs 77.1 minutes, p=0.64) between the first half and second half of cases, but a higher proportion was performed by surgical trainee in the latter (18.8% vs 47.9%, p=0.002), compared to 34.1% for CLC. In a mean follow-up of 6 weeks for DILC, 4 patients suffered from umbilical wound infection and 1 from gallbladder fossa collection requiring antibiotics.

Conclusion

DILC is technically feasible and safe for uncomplicated gallbladder disease. It can be implemented for daily practice and be manageable by trainee under supervision with short learning curve.

Challenges in building a new Day Surgery Centre: the Belgian situation

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Every year, the shift from classical hospitalization to day surgery increases, requiring for a number of Belgian hospitals to perform infrastructural modifications. In the meantime, a great number of hospitals are planning or constructing completely new medical facilities. The aim of this paper is to compare how these hospitals deal with the required flexibility and how the

different organizational models have influenced the architecture of the day surgery centres. We will overview the plans of several day surgery centres in Belgium and will point out the different challenges that are met and try to formulate recommendations that could be useful for future plans for day surgery centres.

Regional Anesthesia in the One Day Surgery Setting

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The purpose of a one-day surgery center is to surgically correct health problems and get the patient back to his or her familiar environment as speedily as possible. Some of the procedures need more anesthesia than can conveniently be given locally, thus the anesthesiologist is brought in. In this context, it is up to the anesthesiologist to provide an adequate environment for the procedure to be expeditiously carried out. While it is true that all the procedures can be carried out under a general anesthetic, these is a definite place for regional anesthetics, either as the primary anesthetic of choice, or to supplement a general anesthetic so that the patient can be safely and expeditiously

discharged home. For surgeries below the umbilicus, a good choice of anesthetic can be a spinal anesthetic, using a Whitaker needle, and Lidocaine as the agent of choice. Other regional blocks that can be performed in an out-patient surgical setting is a Bier Block (IV regional block), wrist block and ankle block. In selected patients and in the right hands, regional anesthesia can be an excellent alternative to general anesthesia, with rapid ambulation after the surgery, and safe, expeditious discharge home.

Analysis of Day Surgery Gynaecology in India

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Presenting a retrospective analysis of 1418 case in Gynacology, performed as Day Case over aperiod of 5 years. Dr. Dande Hospital, is a 50 bedded General Hospital, privately owned and situated in Central India with patient population coming from rural India. Acceptance of Day Surgery was initially minimal, but, the numbers are now slowly increasing. We have used Protocols set up by The Indian Association of Day Surgery, and

are following them in Case selection, Preparation and Discharge with marked success. Our readmission rate has come down to zero, which I would like to share with you.

Major Out-Patient surgery under local anesthesia – 15 years experience

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Background

We intend to demonstrate through the analysis of our records, that in selected patients, it is possible to safely carry out major out-patient surgery under local anesthesia.

Methods

After having identified major surgeries under local anesthesia, we studied our department statistics, over a period of 15 years.

Findings

We identified 6456 surgical interventions, of which 2769 were abdominal wall hernia repairs, 1325 sinus pilonidalis excisions, 206 breast surgeries, 233 proctology interventions, 469 male genitalia procedures, 790 excisional biopsies of adenopathies and 68 vascular system interventions. We would like to note that 1285 procedures were excluded from our study, as they were long-term totally implantable venous access system placements. Our mortality was 0% and in the hernia group, the largest, there were less than 9% patients with immediate complications and a recurrence rate of 1.1%. We selected certain clinical cases and their respective video captured procedures as evidence.

Interpretation and Discussion

Our goal is to establish the concept that major out-patient surgery under local anesthesia not only does not decrease patient safety as it can allow increased efficiency and better resource

allocation of a surgical department, bridging the existing gap left by the inadequately low number of anesthesiologists. Nevertheless, we would like to note how indispensable anesthesiologists are for an out-patient surgical ward to achieve its full productivity potential.

Trials and Tribulations of Day Surgeon in Kochi – first hundred cases

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Kochi (Cochin) is an important city in the state of Kerala, which is the southernmost city of India. It has a population of 601,574 in 2011. Its urban / metropolitan population is 2,117,990. We have a 4 tier practice system, with General Practitioners making the lowest rung of the system, poly clinics with availability of basic specialties like internal Medicine, General Surgery, Gynecology & Obstetrics and pediatrics, small hospitals which have 75 to 100 beds, and large hospitals with all major specialties with up to 1000 beds. We also have smaller institutions focusing on a single specialty like Gynecology, ophthalmology, ENT etc. Very few centers advertise and practice day surgery, though it is now catching up. There are no stand alone day care centres in the city yet. Though I have been doing out-patient surgery and

discharging patients early, it was not an organised set up with a different set of rules for a long time. I have been practicing day surgery with in an organised set up since 2010. I now practice day surgery in 2 institutions within the city limits This paper is about my personal experience in organizing the day surgery in these institutions. My experiences, good and bad, with patients, hospital managements and the existing attitudes among the patients and the professionals. It is also about the first hundred cases I have done during these 2 years (2010-2-11 and 2011-2012) in the beginning most cases done were ano-rectal problems. Later on many procedures were added including hernia repairs and appendectomies. Response is encouraging

Minilaparotomy cholecystectomy with ultrasonic dissection versus laparoscopic cholecystectomy

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Introduction

Minilaparotomy (MC) and laparoscopy (LC) are two mini-invasive techniques for cholecystectomy. Ultrasonic dissection (UsD) technique has been used in laparoscopic cholecystectomy, but the technique is rarely considered in MC. Patients: Initially 88 patients with uncomplicated symptomatic gallstones were randomised into MC with UsD (n=44) or LC with conventional electrocautery (n=44) over a 2-year period (2010-2012). Both groups were similar in terms of age, gender, American Society of Anesthesiology (ASA) physical fitness classification, and operating surgeon.

Results

The two groups were similar in terms of the operative and the operation theatre time, the postoperative nausea and vomiting, the use of analgesics, the success of day-surgery and satisfaction of the procedure. The MC-group had significantly less postoperative pain than the LC group (1h 2.8/4.0, p=0.031, 2h 1.55/3.00, p=0.011, 3h 1.34/2.52, p=0.001, 4h 1.25/2.13, p=0.035). The mean length of sick leave was 13 days in the MC group and 16 days in the LC group (p=0.055). Conclusion: The patients with MC-UsD had less postoperative pain and 2-3 days shorter sick leave than the patients with LC cholecystectomy.

Brief Introduction of Ambulatory Surgery Center of West China Hospital, Sichuan University

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The Ambulatory surgery center of West China hospital, West China School of Clinical Medicine of Sichuan University, was established in on October 28, 2009. There are 6 operating rooms and 32 ward beds which provide good service for over 300 kind of surgery in multiple operations including general surgery, urologic surgery, ophthalmological surgery, Digestive Endoscopy, Nephrology, plastic surgery, thoracic surgery, orthopaedic surgery, pediatric surgery and Otolaryngologic surgery, etc. In 2010, Ambulatory surgery accounted for only 8% of total elective surgical of WCH. In 2011, With a share of 16%. In the first half of 2012 accounted for 22%. We focus on the operation the patient's medical security and medical quality and formulate the corresponding measures, such as patient admittance system, surgical access system, surgery and anesthesia doctor the doctor's access system, preoperative evaluation, a recovery room evaluation, the hospital evaluation, postoperative follow-up, and the emergency

plan, etc. Each kind of surgery have corresponding clinical pathway. With clinical pathway as the link established ambulatory surgery rapid rehabilitation team by surgery doctors, anesthesia doctors, ward nurses, operating room nurses, follow-up nurse, etc. After 3 years of hard work we got results that the patient's satisfaction of Ambulatory Surgery Center of WCH more than 95%, the hospital again within 28 days in hospital rate was 0.5%, turn hospitalization rate was 0.14% and surgery cancellation rate 1.97%. Chinese medical resources accounts for only about 2% of the world, or, every one thousand people probably only 2.4 beds. Practice has proved that the safety of the ambulatory surgery, while patients with a mean hospitalization expense can reduce about 20%, the average hospitalization time can be reduced by 80%, the hospital resources can be fully used, the Social Medical Insurance of the corresponding reduce.

How efficient is day surgery in a satellite unit?

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Introduction

Our hospital has a dedicated day surgery unit (DSU) as recommended by department of health, UK [1], but due to increasing number of day surgery procedures being undertaken a satellite day surgery ward (SU) was opened in the main hospital in 2008. We wanted to evaluate whether there was any difference in efficiency between the two units.

Methods

Data was collected for all patients having a day case procedure under general anaesthetic (n=16263) over two years (July 2009 to Aug 2011) using our computerized record system (Galaxy Surgery, iSoft).

Results

Time spent in secondary recovery (SR) in DSU is shorter than for same procedure in SU however did not reach statistical significance. Admission rate from SU was higher (5.46%) compared to DSU (2.09%). This was statistically highly significant. (p value <0.0001, chi-squared test). Surgical times for both units were similar. Procedures DSU SU SR time DSU SR time SU SR time Admission Admission (minutes) (minutes) difference from DSU from SU median median minutes % % Cystoscopies 625 72 88.5 135.6 47.1 1.3% 2.8% Gynaecological Laparoscopic 588 67 119.8 179.5 59.7 6.3% 10.5% Inguinal Hernias 434 182 154.4 197.6 43.2 3.9% 4.9% Laparoscopic Cholecystectomies 290 135 302.6 305.9 6.1 14.5% 17% Knee Arthroscopies 488 375 107.7 163.4 55.7 0.6% 2.7% Conclusions: Despite implementation of established processes from DSU to SU [2], secondary recovery times are longer and admission rates above nationally recommended standards [3]. DSU performed better in terms of efficient usage of time and with regards to unplanned admission rates.

Inadequate postoperative pain control in ambulatory surgery

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Introduction

Postoperative pain control is one of the most important objectives in ambulatory surgery in order to reach patients satisfaction and to avoid unplanned hospital admissions. This study investigate pain relief in an ambulatory surgery unit.

Methods

A total of 24035 patients were scheduled to be operated on in an ambulatory surgery unit from March 1995 to November 2012. The surgical specialities included were Ophthalmology (45.9% of patients), General Surgery (19.8%), Orthopedic Surgery (13.4%), Urology (7.2%), Vascular Surgery (6.1%), ENT (4.9%) and Gynecology (2%). Both patients and their caregivers were instructed in pain control using oral drugs as metamizol or paracetamol complemented with diclofenac every six or eight hours during the first 3-7 days after surgery. Recovery events were registered in a database during the first 30 days of postoperative period. Statistical analyses were performed using Stat-View 5.1.0 software.

Results

A total of 470 patients (2%) had bad pain control, 36 of them needed hospital admission and other 2 hospital readmission. Bad pain control was related mainly to inguinal hernia repair (16.6%), cataract surgery (15.7%), hallux valgus correction (8%), knee arthroscopy (7%), carpal tunnel decompression (6.8%) and anal surgery (6.4%). CONCLUSION: Adequate pain control is important to avoid patient dissatisfaction, adverse physiological effects (respiratory, cardiovascular, gastrointestinal, urinary and metabolic) and unplanned hospital admissions. Hernia repair, hallux valgus correction and anal surgery are the procedures more frequently related to bad pain control.

Questionnaire surveys in ambulatory surgery. Conclusions after 13 years using questionnaires

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Introduction

The majority of patients are satisfied with ambulatory surgery. However, information provided by satisfaction questionnaires must be analyzed deeply in order to identify complaints and areas of improvement.

Methods

At the time of discharge an anonymous questionnaire with 25 scaled close-ended items and 6 demographic variables was given to 21631 patients operated on in our day surgery unit from April 1999 to November 2012. Questions were grouped in 5 areas and answers were transformed into a score system. Statistical analyses were performed using Stat-View 5.1.0 software.

Results

A total of 9283 patients (43 per cent) responded. Eighty-four per cent of patients were satisfied with the day surgery unit and 95.8 per cent of them would choose the unit again if necessary.

The mean total score was 84.6 with only 19 patients under 50. The analysis of different areas showed complaints about the time on waiting list, anxiety the night before the operation and postoperative pain control. Demographic variables allowed comparisons among patients finding that the highest scores were related to patients between 41 and 65 years old, male, married and high level education ($p < 0.0001$). There were no differences related to either rural / urban habitat or employment situation ($p=0.25$, $p=0.21$).

Conclusion:

1. Questionnaire surveys in ambulatory surgery allow, not only to know patients satisfaction, but to identify the reasons for patients dissatisfaction.
2. The transformation of qualitative data in a score system allows to monitor improvements and to compare groups of patients by applying more powerful statistical tests.

Consent for cholecystectomy – Do patients really understand what we are talking about?

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Introduction

General medical council (UK) states consenting is 'patients and doctors making decisions together'; doctors outline potential risks, benefits and alternatives to patients to encourage an informed decision. Patients are often consented on the day of surgery; time constraints might affect adequacy of information provided by doctors and patient anxiety affecting understanding may result in a suboptimal consenting process.

Aim

To assess quality of consenting process for day case laparoscopic cholecystectomy (LC) when consenting is carried out on the day of surgery in terms of patient understanding and adequacy of information provided during consent.

Method

From March–July 2012, 50 patients consented for LC, filled out a questionnaire compiling complications and percentage

risks provided during consenting. The questionnaires and consent forms (CF) were reviewed to identify discrepancies between the two and assess completeness of information in CF. Results Large discrepancies existed between information in CF and understanding by patient with important risks like CBD injury and bile leak not remembered by 22% ($n=11/50$), and 18% ($n=9/50$) of patients respectively. The quality of CF was suboptimal with key risks such as CBD injury/bile leak not mentioned in 4% of CF ($n=2/50$) and patient identifiers missing from 34% ($n=17/50$) of forms.

Conclusions

Consenting on the day of surgery for day case LC results in suboptimal consenting in terms of patient understanding and the quality of consent forms. We propose providing a pre-printed CF and information leaflet explaining the procedure to patients prior to the day of surgery and the consenting process be re-audited.

Excision of infected Pilonidal Cyst with Primary Repair by Limberg Flap

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Pilonidal cyst is a common disease bothering patients and surgeons as well. Its surgical treatment is still debatable. Varying from simple incision to total excision with or without closure. It is well known that wherever there is several treatment options it means there is no gold standard. The primary repair of chronic non infected pilonidal cysts with flap is generally accepted while the infected cysts are mostly widely excised and left open for secondary healing. Which might take 6–8 weeks. We present our experience in treating the infected pilonidal cysts with primary repair by Limberg Flap. 100 Cases have been operated from June 2006 till May 2012. The complication rate is minimal. No recurrences occurred. The operation can be done as a daycare or even out patient. General or spinal anaesthesia is required. The patients can walk from day one on. The pain scale is below 2. And the satisfaction of the patients is excellent.

Conclusion

The excision and primary repair of infected pilonidal cyst by limberg plasty is a modality which can be considered as gold standard for the treatment of the disease. The patient does not have to come for daily dressing and to worry about the healing of his wound. Patient can go to work from day 7 on. Stiches are removed after 14 days. And the patient can have his normal lifestyle from day one.

Ambulatory surgery for fistula in ano

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Aim

To evaluate the safety and efficacy of ambulatory surgery for fistula in ano using the VAAFT technique.

Materials and Methods

This is a prospective study involving 113 patients in the age group of 18 to 74 years with fistula in ano who were subjected to VAAFT (video assisted anal fistula treatment). 74 patients had transphincteric, 30 intersphincteric and 9 had low anal fistulas. 12 patients were well controlled diabetics. All patients were started on iv antibiotics preoperatively which was converted into oral antibiotics after 24 hours. 37 patients had spinal anesthesia and 74 patients had general anesthesia. The patients were subjected to diagnostic fistuloscopy using meirero's fistuloscope where the fistulous tract was delineated and the internal opening identified when present. This was followed by the therapeutic

phase where the tract was cauterized, cleaned and the internal opening closed with sutures or staples.

Results

Patients had minimal post operative pain (pain score 1 & 2) on post operative day 0 and 1. All patients were discharged within 24 hours and returned to work within 48 hours after surgery. there was no sphincter incontinence. Conclusion-VAAFT is safe and effective for ambulatory surgery for patients with fistula in ano. As there is no surgical wounds the need for wound care and dressings are eliminated. Patients are discharged within 24 hours and return to their normal work within 48 hours. there is no risk of sphincter incontinence.

Streamlining Day Surgery using Information Technology

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The Surgery Centre was opened in January 2011 as part of the Medica Centre Complex. The hospital was set up as a test site to assess the best use of various IT infrastructures in both day and extended stay surgical patients. The hospital comprises of 7 theatres and 24 beds, catering for a 80:20 ratio of day to extended stay patients. Given the unique smallness of the hospital, the management team were able to purchase a wide range of IT software programs and equipment in order to assess their relevance and impact on improving patient flow and care. Due to the size of the hospital we were able not to over capitalise on equipment whilst ensuring systems were placed in all aspects of administration, theatre and clinical environments.

This presentation aims to show how advances of IT systems in small facilities can be both economical and can lead to improvements in patient care. As part of streamlining care utilizing IT systems, it was also found to improve hospital credentialing and many aspects of quality management, which was evident in the hospital being successful in achieving four years accreditation despite only being open for one year. This presentation looks forward to showing you what can be achieved after implementing hospital wide IT systems.

Sedation for painful procedures by non-anesthesiologists

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Background

There is an increasing demand for sedation in patients undergoing interventional procedures in a day care setting. Due to shortage of anesthesiologists, even moderate to deep sedation is increasingly performed by non-anesthesiologists.

Methods

In 2006, a pilot project was started at the Academic Medical Center AMC Amsterdam to train nurse anesthetists to perform moderate and deep sedation using propofol. The program involves both, theoretical and practical training under direct and indirect supervision of an anesthesiologist and takes 1 year of post graduate education. Results: Until 2012, a total of 145 nurse anesthetists successfully completed this program in the Netherlands. The AMC started with 4 certified sedation specialists in 2007, this group grew to a number of 19 in 2012 and none of the certified specialists left the hospital until today. The demand of the Gastro-Enterology department for

moderate to deep sedation ranged from 2 to 18 half day sessions/ week, and the work was extended to interventional radiologic, pulmonologic and cardiologic procedures and includes patients of ASA categories 1-4. Introduction of deep sedation using propofol by specialized nurses abolished the necessity of reanimation calls in the respective specialities. Registration of complications using a modified Adverse Event Reporting tool of the World SIVA International Sedation Task Force has recently been introduced and allows determining safety aspects and identifying topics accessible for further improvement.

Conclusion

Moderate to deep sedation by non-anesthesiologists using propofol only under indirect supervision of an anesthesiologist is safely performed after adequate training and specialisation of anesthesia nurses.

Challenges in oral and maxillofacial surgery and anesthesia – ambulatory surgery in geriatric surgery

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Maxillofacial surgical intervention might be complicated due to a compromised medical situation in geriatric patients. The aim of the present study was to evaluate the course, complications in geriatric patients undergoing ambulant maxillofacial surgery in general anesthesia. In the present study 349 patients (average 68.5 years, 213 female, 136 male) that underwent ambulatory surgery in a one year period were included. 265 patients underwent oral surgical interventions and 84 plastic facial interventions. The average time of surgery was 38 min (5-180 min). The ASA-categories were as follows: ASA-I (154), ASA-

II (74), ASA-III (121). In 3 patients postoperative bleeding required an inpatient treatment. No patient needed inpatient treatment due to complications related to anesthesia. 6 patients stayed overnight due to insufficient surveillance at home could be provided. Based on the data one can conclude that ambulant oral and maxillofacial surgery can be safely performed. Besides the well described economic advantages of outpatient treatment the social benefit of remaining in the familiar environment especially for geriatric compromised patients should gain more influence in the treatment planning.

Preincisional versus postincisional infiltration of local anaesthesia – Pain assessment after Lichtenstein inguinal hernioplasty

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Pain following hernia repair is not uncommon and can be frequently disabling and impairs quality of life. Its persisting appearance is a severe complication. Based on the theory of “dorsal horn hypersensitivity”, several clinical trials have shown significant improvement in pain control with preincisional infiltration of local anaesthesia. In this prospective, randomized clinical study, we compare the effect of preincisional versus postincisional infiltration of local anaesthesia on postoperative pain in ninety patients undergoing Lichtenstein inguinal hernioplasty for unilateral primary inguinal hernia. Postoperative pain intensity was rated at 6h, 24h, 1st week,

1st and 6th month postoperatively using visual analog scale (VAS). Data was analysed using IBM Statistics 21 software. P value under 0.05 was considered significant. Postoperative pain score was always lower in the preincisional group. A statistically significant result was found in the 6th month after hernioplasty. Conclusion: We may conclude that patients undergoing preincisional local anaesthetic infiltration presented less pain throughout the postoperative time, with statistical significance 6 months after surgery. Therefore, we are encouraged to continue our study to assess pain control benefits of preincisional local anaesthesia throughout all postoperative period.

Laparoscopic Inguinal Hernioplasty in Day Surgery

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Inguinal hernia repair is the most frequently performed operation in general surgery. Laparoscopic hernia repairs have several advantages over the conventional open methods and permitted the benefits of minimal invasive surgery techniques and its applicability in Day Surgery Units. This paper presents the experience of Unidade de Cirurgia Ambulatório (UCA) - Hospital Santo António – Centro Hospitalar do Porto, in the treatment of Laparoscopic Hernia repair. In the period January 2007 and December 2012, it were submitted to surgery 173 patients, in a total of 296 Hernias, from wich 15,2% were recurrent hernias. The distribution of the laparoscopic treatment was: TEP – 157 patients (90,8%), / TAPP – 16 patients (9,2%) in wich was also performed in 4 patients (2%) a laparoscopic cholecistectomy. In the post operative period, 8,1% of the

patients registered some kind of minor complication and all of them left hospital until 7 p.m of the same day of surgery, after it were guaranteed the discharge criteria from UCA (PADSS). All patients were evaluated in 1st week, 1st month and 6th month. The medium needs of analgesia was 2 days, the morbidity rate was 9,8% and recurrence was 3% (9 cases). The medium recovery for normal day activities was 4 days and for labour activities was 10 days. Conclusion: The laparoscopic treatment of Inguinal Hernia in Day Surgery, is a procedure that must be considered in the surgical indications of the different Ambulatory Surgical Units, since there are created the best conditions for its applicability.

Our experiences with modified Bösch osteotomy

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The purpose of this study is to evaluate the outcomes of surgical treatment of moderate Hallux Valgus deformity with the use of modified Bösch osteotomy.

Methods

From January 2009 to December 2012 47 (4 bilaterally) osteotomies were performed. We used a limited exposure, we repaired the medial capsule with tightening the abductor hallucis tendon. One or two Kirschner wire was used to splint the osteotomy site, which was removed after 4 weeks.

Results

Patients were evaluated with a mean follow up of 5-48 months. The patient age ranged from 20 years to 72 years (mean 56 years) with 1 men and 42 women. All except one foot showed excellent to good clinical result. There were four cases with undercorrection . The clinical and radiographic outcomes were assessed. The satisfaction rate was 90%. Complications included 4 episodes of stiffness, six episodes of pin tract infection. There were no cases with nonunion, overcorrection neither osteonecrosis. Conclusion: The Bösch osteotomy with limited exposure offers an effective, safe and simple way to treat hallux valgus with a first intermetatarsal angle less than 15°.

Setting up a day-surgery laparoscopy unit in a developing country

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In India day surgery is still a distant dream. In the government sector, most patients still stay in the hospital for anywhere between 3 – 5 days or more after surgeries like appendectomy, cholecystectomy, hernia repair, piles and fistula. This puts a strain on the hospital resources which can be better utilised. We have followed a standard protocol and could discharge patients undergoing laparoscopic surgery within 6 hours. In this paper we highlight the various pre-op, intra-operative and post-operative measures we have undertaken to make this ultra-short stay possible in India in the private sector. An exclusive hospital for day-surgery is one of the key factors in making this possible. Our facility in Chennai, is a state-of-the-art hospital exclusively designed for day care surgery. All the theatre and para-medical

staff are attuned to the concept and contribute their share for the same. The surgical team primes the patients all about the short-stay surgery and get them mentally prepared anyone from day-surgery. Intra-op analgesia with enteral and parenteral analgesics and nerve blocks seem to contribute immensely to an early discharge for the same. ASA grade I & II patients are chosen and patients with a co-morbid condition or a possible difficult surgery are excluded. Rigorous pre-anesthetic check is then performed. Finally a pick-up from home and dropping back by the hospital vehicle has a very positive impact on these patients. In conclusion adoption of day surgery model to countries like India is fruitful and beneficial to the hospital as well as to the patient.

Ultra-short stay laparoscopic cholecystectomy

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Laparoscopic approach to cholecystectomy has become the gold standard worldwide. With the advent of short-stay surgery (day-surgery) more and more centres in the developed nations adopted day-care laparoscopic cholecystectomy. In countries like India, still a majority of patients for a laparoscopic cholecystectomy are kept in the hospital for 2 - 3 days. This is because of the lack of awareness of day surgery and its advantages. In a dedicated day surgery centre in south India we have completed 200 consecutive laparoscopic cholecystectomies as a day procedure and sent them home after an average of 5.4 hour stay. This time duration is a lot less than that is practised everywhere. This was made possible because of a dedicated day surgery facility with well trained staff, proper selection of cases, Standardised surgical technique and most of all a proper anaesthetic technique including a pre-operative bilateral

TAB (transverse abdominis block). This nerve block with the addition of appropriate oral and parenteral analgesics gave a 24 hour post surgery pain score of 0/10 (VPS). None of these 200 patients were re-admitted for any post-operative issues nor consulted us over the telephone. This phenomenon really surprised us and now we have come to believe that a patient undergoing laparoscopic cholecystectomy as a day-care procedure can very well be discharged in less than 6 hours of time. We believe that this day surgery phenomenon should be adopted by a larger number of clinicians in the developing world as well.

Perioperative nursing of older adults experiencing cognitive impairment in day surgery

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Whilst many of the physical concerns of the older perioperative patient have been increasingly met there remains a chaotic pathway in the nursing assessment of the cognitively impaired older adult. This is particularly pertinent for those patients entering day surgery where often information as to health status has to be collated from different sources within a short time frame. Many publications from numerous studies have focused on the topic of perioperative care of the older person the researchers have overlooked the complexity and relevance of a diagnosis of dementia and the progression of the cognitive impairment, as well as the psycho-social issues specific to the patients and those who care or support them. What constitutes a data subset of the older patient, in Australia is increasingly open

to debate with its progressively fitter and healthier society. A bedside or admission symbol to alert staff in the identification of people experiencing cognitive deficit by a discreet emblem which is universally recognizable is beginning to make traction into surgical facilities. In Australia through a logo developed in association with those experiencing dementia and their significant others is being rolled out. Although Day surgery can call on research from all areas, because of the uniqueness of the environment and the immediacy of the patient being discharged out into the community there is a requirement for greater investigation into the perioperative experience of the cognitively impaired patient and all the stakeholders. This paper addresses this deficit.

Day Care Surgery in India: a sample study

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Aim

A feasibility study was done by a retrospective analysis of 2966 surgical cases, performed as Day Case, at One Day Surgery Center, India's First Multi-speciality, stand alone, dedicated Day Surgery Centre, in Mumbai-a metropolitan city, with an aim to creating a prototype DSC. Introduction: Day Care Surgery, as it is popularly known in India, is in its initial stages. There is a definite interest in establishing and propagating Day Surgery over the past 5 years.

Material

Data collected from July 2008 to June 2012, were analysed retrospectively, of different specialities, performed at the Centre. Categorized as OPD: 779 cases, Day Cases: 1971 cases, Extended Stay: 1705 cases. Mean average hospital stay was 6 hours.

Method

Both centres are ISO 9001-2000 compliant, created specifically for Day Surgery. Case selection and criteria for patient preparation and discharge were followed as per recommendation of The Indian Association of Day Surgery. Pre-operative counselling was performed during the first consultation. The discharge process was strictly monitored and criteria are followed. Complications were explained to the patient along with post procedure instructions. Readmissions were carefully noted.

Conclusion

Results revealed a marked trend towards better acceptance in towards Day Surgery, with more willingness to go home on the same day of the procedure. Marketing and meticulous implementation of Protocols as a safeguard, providing a high standard of patient care, eventual will lead to acceptance increasing acceptance. Readmission in Day Surgery Cases were nil.

Ambulatory ankle fracture surgery in southeastern Norway – a safe and cost saving approach to a common injury

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Introduction

Ankle fractures are common. In the last decades, ankle fracture surgery has been improved and refined. In most Norwegian hospitals, these patients are often hospitalised for 8–12 days. In 2012, Akershus University Hospital performed ambulatory surgery for selected ankle fracture patients when acute surgery within 8 hours was unavailable. We wanted to review the patient records and study the results of this novel approach to ankle fractures.

Methods

Closed, low-energy ankle fractures in patients otherwise relatively healthy (ASA I/II) without obvious compliance issues was scheduled for ambulatory surgery 5-14 days after injury (N=109). 23 cancellations occurred; 4 patients refused surgery, 14 patients had soft tissue problems and were postponed, 1 patient preferred a private hospital. 3 patients were cancelled by the surgeon and treated conservatively, and 1 patient was admitted for inpatient surgery (BMI=40).

Results

Preliminary complication rates at 3 month follow-up indicate surgical results comparable to those in the international literature. At the IAAS conference, the final figures will be presented. 86 ankle fractures including 48 lateral malleolus fractures, 11 medial malleolus fractures and 27 bi- or trimalleolar fractures were treated with ambulatory surgery. Using the reported mean lengths of stay in the literature (8-12 days), the estimated initial annual saving was a considerable 688-1032 patient nights corresponding to EUR 470,000 – 690,000 per year (EUR 680 per patient bed per night). Conclusion: Many ankle fractures may be safely treated with ambulatory surgery. This will free up resources for the department to handle other segments of today's fracture burden.

Trials and tribulations in organizing a perfect day surgery center in a developing country

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Day surgery is a relatively new concept in India. Day surgery centers started appearing in India only in the last 2 years. And these are essentially a franchisee of a known group from abroad. And these are essentially extended short stay units (stay of 2–3 days). We are the first in India to start an exclusive full-fledged day surgery center in the corporate sector. We are a part of a renowned corporate chain of hospitals in India and this is our maiden attempt in starting an exclusive day surgery center. With just over a year of our existence and with immense satisfaction of the success of our center we come to believe that day surgery

concept is the way to progress in the field of health-care delivery and we hope that many more such centers should come up in our sub-continent. We thought it to be apt to share our experiences we gathered in designing our center, recruiting the right mix of manpower, training them the right way to handle day care patients, fine-tuning our operation rooms and ICU for this purpose and come out successful. We would also discuss the tribulations we went through in getting the health insurance companies to recognize the day care concept.

Ambulatory laparoscopic cholecystectomy: A review of our experience

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Background

Laparoscopic cholecystectomy for suitable patients with asymptomatic or non complicated gallstones is the elective procedure performed in ambulatory surgery centers. Accurate pain control and an experienced surgeon in laparoscopic procedures are mandatory for satisfying outcomes.

Methods

Data patients undergoing laparoscopic cholecystectomy in our outpatient surgical center from February 2008 to October 2012 were analyzed retrospectively.

Results

A total number of 88 women and 26 men underwent ambulatory laparoscopic cholecystectomy. There was no mortality or conversion to open surgery. A catheter in the surgical site was placed for ropivacaine 0.5% perfusions every 90 minutes after surgery for pain control. All patients were discharged 6 hours after the procedure, 2 of them requiring transfer to the hospital of reference. Morbidity rate was 14.9%, being the umbilical seroma the most common complication. Pain control was satisfying during the first 48 hours after surgery, as well as during the follow up one year after the procedure.

Conclusion

Based on an appropriated selection of patients, laparoscopic cholecystectomy is a safe procedure for ambulatory surgery. The use of a catheter for anesthetic instillation during the first hours after surgery seems to be an effective measure for pain control.

Ambulatory outpatient hernia surgery. Our experience in bilateral hernia repair and laparoscopic techniques

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Background

Hernia surgical repair is the most common general surgical procedure. Same-day elective surgery for suitable patients is the treatment of choice. After the tensionless technique described by Lichtenstein, the Prolene Hernia System and the preperitoneal space, nowadays methods like TAPP and TEP the latest approach. The precise role of laparoscopy remains somewhat controversial, but it is preferred by many surgeons for bilateral, recurrent and femoral hernias.

Methods

Data from all patients undergoing bilateral hernia surgical repair and laparoscopic procedures in our outpatient surgery center from January 2010 to January 2013 were collected and analyzed retrospectively.

Results

There were 72 patients undergoing bilateral hernia surgical repair, 25 of them were performed laparoscopically with one conversion to open surgery due to pneumoperitoneum

intolerance. Unilateral hernia laparoscopic surgery procedures were performed on 8 patients with recurrent hernia. There was one conversion as well to open surgery. Technically there were 8 TEP procedures (with one conversion to TAPP due to peritoneum rupture) and 22 TAPP procedures. The main postoperative complication was testicular hematoma, which was seen in 20 patients undergoing conventional surgery and in 6 patients undergoing laparoscopic procedures. No recurrence or major complications have been reported in laparoscopic procedures in comparison to the conventional open technique.

Conclusion

One day elective surgery is suitable for bilateral hernias and laparoscopic procedures. Our experience shows low morbidity and no mortality rates for both open surgery and laparoscopic techniques, with low recurrence rates and no differences in postoperative pain, hospital stay or complications between both approaches.

Laser haemorrhoidoplasty (LHP) – with all the advantages of the day-case surgery

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In our day surgery clinic in 2012 – as a newly introduced method beside the „traditional” haemorrhoidectomy – we operated in 30 cases haemorrhoid operation with LHAL/LHP procedure. We used BIOLITEC 980 nm diode laser and special handpieces. All operation was performed in iv. anaesthesia. The average operational time was 25 minutes. After surgery, patients were observed for 6 hours until the emmission. In the postoperative period we experienced significant advantage compared to „traditional” haemorrhoidectomy in two areas: postoperative bleeding and in the postoperative pain. Small marginal wound’s bleeding occurred around 30% of cases at the traditional operations, this number fell short of 5% after LHP. After the surgery pain was perceptible max. 2 days, strength of the pain was in average 3 on scale of 10. The patients who

were operated with the traditional technology, felt moderate pain also after 5-7 days. For disadvantage, we detected residual haemorrhoids in 3 cases (10%), which were all removed after a second intervention.

The used materials are expensive, this could be also another additional disadvantage.

After all, we could utilize these positive results of this minimal invasive technology in the day-case surgery supplies, because it has all of the advantages, which the day-case surgery treatment could be undertake: fast, exact, amount to with minimal postop. pain and low complication-rate (bleeding). Finally, for the patient the most important thing is to return to work only after few days.

What’s driving day surgery diffusion? An application to Portugal public hospitals

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Ambulatory surgery is a cost-saving technological and organizational innovation. The literature suggests ambulatory surgeries are cost-effective, contribute to reduce the waiting time and increase the hospitals productivity. These are critical aspects for Portuguese health care system facing several challenges and dramatic financial cuts. Day surgery has gained increasing significance in Portuguese health care during the last years and now constitutes 43,7% of non-emergency surgeries (Lemos, 2011). Nonetheless, there are still significant differences among regions and hospital. Moreover, data also suggests some variation within hospitals among specialities and across time. The aim of this paper is to explain the observed variations in ambulatory surgery rates among and within

Portuguese hospitals. We set up a theoretical model based on diffusion theory. The theoretical model is translated into a regression model. Main data come from the National Survey on Ambulatory Surgery published by the Portuguese Association on Ambulatory Surgery (APCA). The survey covers a period of five years and includes data for the sixty public hospitals with surgical activity in Portugal. The data covers over thirty non-emergency surgeries. The paper discusses the role of organizational factors and economic incentives on adoption and diffusion of one day surgery for the most frequent procedures. Lemos, P. (2011) A Huge Increase in Ambulatory Surgery Practice in Portugal, *Ambulatory Surgery*, 17(1): pp 1-8.

Single visit (one-stop) endoscopic hernia repair is feasible, efficient and highly satisfactory

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Background

One-stop surgery offers patients diagnostic work-up and subsequent treatment of a clinical problem on the same day. In the present study patient satisfaction and institutional efficacy were evaluated in patients who were referred for one-stop endoscopic inguinal hernia repair. Method: All consecutive patients referred for the one-stop optional route in a high volume hernia clinic, were prospectively registered. Patients were screened for eligibility by the department secretary when the appointment was made. TEP hernia repair under general anaesthesia was the preferred operative technique. Patient's satisfaction, successful day surgery and institutional efficiency were evaluated.

Results

Between January 2010 and January 2012 a total of 349 patients were referred for one stop hernia repair of which 336 patients completed the entire procedure (96,3%). Median age was 47.5 years and 96,3% were males. In thirteen patients (3,7%) no operative repair was done on the day of presentation due to an incorrect diagnosis (n=7), a watchful waiting policy for asymptomatic hernia (n=3), one scrotal hernia was rescheduled and there were 2 "no shows". Following hernia repair 97% of the patients were discharged on the same day, ten patients required hospitalization. Based on questionnaires the main satisfaction score among patients was 9.0 (8,89 - 9,17 95% CI) on a scale ranging from 0-10.

Conclusion

One-stop hernia surgery is feasible in the vast majority of patients that were screened by phone before their visit. One-stop surgery improves access to service without an impact on the safety of the treatment. Patient satisfaction was high.

Summer Plan for Day GA Circumcision for Children

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Introduction

In the busy acute hospital setting (Tuen Mun Hospital), day surgery cases used to be performed intermingled with other major cases in elective lists. Childhood circumcision is often considered as low priority with disproportionately long waiting time or as ad hoc early morning "fillers" for junior surgeons.

Aims

1. To shorten the waiting time for the surgery 2. To better the surgical experience of both the children and their parents in the entire patient journey.

Method

An operative program (S-Plan) was devised with dedicated OT sessions to facilitate the circumcision of children under day GA in July & August (4 weeks) yearly during the summer school vacation. That was achieved by a collaborative party of surgeons, anaesthetists, Day Ward nurses, OT nurses, SOPD nurses, A&E doctors as well as staff from various ancillary units like

Admission Office, Record Office, Catering and Patient Resource Centre. Both the children and parents would join a Pre-operative Assessment Service for a day, during which pre-operative talks were delivered by the various healthcare professionals to explain the indication, pre-operative preparation, surgical techniques, wound care, admission & follow-up arrangement, surgical & anaesthetic complications, together with a video introduction of the operating room environment.

Benefits

- Avoidance of school lessons interruption
- Batch processing for better OT planning, training and improved efficiency
- Detailed pre-op education and consistent information for informed consent
- Highly appraised Parents Present in Induction Program (PIIP) & Parents Present in Recovery Program (PPRP) for anxiety reduction
- Early management of wound problems via routine phone FU & prn Day Ward assessment

Pediatric general ambulatory surgery analysis

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Day-case surgery is convenient and safe allowing patients to have the appropriate medical service without long waits. The issue of safety has been extensively studied and presented in the literature. In this paper, the Security Forces Hospital experience with Pediatric surgical day-surgery cases is presented.

Objective

Discuss ambulatory surgery of pediatric general anesthesia of the safety of the operation and feasibility

Methods

A total of 174 pediatric surgery children undergoing herniorrhaphy, Stealthingness penis diorthosis, orchiopexy, with general anesthesia, 16 cases of ambulatory surgery ward, 158 cases of Pediatric surgical ward. They are in the same period of hospitalization. Observe and record the patient's postoperative complications and hospitalization expenses, while conducts a statistical analysis of the results.

Results

The children in Ambulatory surgery ward without postoperative complications record. Ambulatory surgery children average days of hospitalization was 1 day and the average days of stay for

pediatric surgery ward's children was 4.47 days. Patients of day-surgery with a mean hospitalization expense can reduce about 13.23%.

Conclusion

The ambulatory surgery of pediatric general anesthesia can be done safely, while reduce the average hospitalization days, reduce the per capita hospitalization cost, increase the turnover of beds, reduced the children family economic burden.

Germany has a long history of surgery in specialized doctor's offices called day clinics.

In 1884 a special "Worker's Accident Insurance" covering injuries caused by accidents during work or on the way to or from work was installed. This insurance is called „Berufsgenossenschaft“ or short "BG" in German.

For this insurance certain standards were defined. So the surgery in day clinics is done under a structural quality and strict hygienic conditions.

The doctors working for the "Worker's Accident Insurance" have to give proof of a special qualification and hold the title „D-Arzt“.

The facility where the doctors treat the patients are called „D-Arzt-Praxis“ since the twenties of the last century.

3458 "D-Arzt-Praxen" were existing in Germany in 2009, 1197 of them in hospitals and 2261 in free ambulant day clinics.

I installed a similar „D-Arzt-Praxis“ in 1989 and had to follow the strict rules of the „Berufsgenossenschaften“ to get the permission to work as a „D-Arzt“.

From the beginning round about 20% of the patients with ambulant operations in my day clinic were insured by "Worker's Accidents Insurances". The rest of the operations were done for general surgery or orthopedic reasons.

Modern Management Of Haemorrhoids

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Background

Proctological surgery is being carried out increasingly on an ambulatory (outpatient) basis. The reasons for this are safe anesthesia, short operation times and low complication rates. This poster depicts the changes that have occurred in our centre in the last 10 years with respect to the treatment of haemorrhoids.

Material and Methods

The place of study was our Centre in Mumbai. The patients were operated during the period from June 2000 to July 2010, that is, since the day care centre was started. A vast range of procedures

have been carried out for different grades of Haemorrhoids. All the procedures were under local anaesthesia and some form of sedation.

Conclusion

With newer techniques being proven as safe and effective, we are seeing a fundamental shift in the treatment of Haemorrhoids with almost all cases moving to an ambulatory setting and with less pain and morbidity than before.

Patient experiences of postoperative symptoms after Ambulatory Surgery

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Study Protocol Introduction

It is well-documented that patients undergoing Day Surgery can experience postoperative symptoms during the early postoperative period. Studies have shown that these postoperative symptoms can be unpleasant for patients, and they can influence patients' postoperative recovery and the time to resumption of normal daily activities. Many studies have examined postoperative physical symptoms such as pain, nausea, vomiting, and headache. However only limited research has examined symptoms like tiredness, dizziness, insecurity and anxiety. The complexity of Day Surgery is increasing. This development warrants continuous assessment of patients, functioning after discharge from Day Surgery, including their ability to resume normal activities of daily living postoperatively.

Aim

The aim of this study is therefore to uncover which postoperative symptoms patients experience during the first week after day surgery, and to which degree their self-experienced level of functioning has been affected.

Design and Methods

The study will be performed as a survey. Patients will be asked to answer the same questionnaire 3 times; the first day-, three days- and seven days after surgery. To uncover patients' experiences of postoperative symptoms after discharge from day surgery, we will develop a questionnaire with both closed and open-ended questions. The EroQol (EQ-5D) will be used to monitor patients' return to habitual functioning. Clinical implications: This study can be used for quality development and quality evaluation of day surgery.

Model Construction of Day Surgery in West China Hospital

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Day surgery has already gain popularity in many developed countries while it just has been introduced to china in recent years. West China Hospital initialized the day surgery manage mode in Oct.2009. This paper mainly introduced the operating process, medical quality and safety security system, the management and advantages of ambulatory surgery in West China Hospital. Our department had completed more than

sixteen thousand day surgeries in the past two years and achieved markedly progress. The day surgery manage mode improved the service efficiency of the hospitals, shortened average length of stay, reduced the medical cost, enhanced the satisfaction of the patients. The ambulatory surgery in china has brilliant prospect and bring benefits for both hospitals and patients.

Day Surgery in rural India

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Aim

Presenting a retrospective analysis of 3642 surgical cases, performed as Day Case, in a rural hospital, situated in central India. Intro: The history of ancient Indian surgeon, Shushrut, in his works of about 400 BC, has described surgery in great details, some of which are still in use. The most unique aspect of these surgeries was that, they were performed as Day Case.

Material

Data collected from July 2008 to June 2012, of surgical cases, in a 50 bedded hospital, in a second rung city, were analysed retrospectively, of different specialities, performed purely as a Day-case: Gynaecology: 1418, General Surgery: 961, Ophthalm.: 564, Plastic Surgery: 293, ENT: 85, Ortho./ Urology: 278, Others: 43. Patients who agreed to be discharged on the same day were taken into consideration. Mean average hospital stay was 10 hours.

Method

Case selection & criteria for patient preparation and discharge were followed as per recommendation of The Indian Association of Day Surgery. Pre-operative counselling was performed during the first consultation. The discharge process was strictly monitored & criteria are followed. Complications were explained to the patient along with post procedure instructions. Readmissions were carefully noted.

Conclusion

No complications were encountered & readmissions were none. Though the number of patients accepting Day Care Surgery in rural India is few, it is slowly being accepted. The Protocols safeguards your patient, affording you to serve them better.

Day surgery laparoscopic cholecystectomy. Comparative analysis of two consecutive terms in a series of 1,132 patients

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Introduction

Laparoscopic cholecystectomy (LC) is the procedure of choice for the treatment of chronic cholelithiasis, developed in programs of short stay (23 hours and without income programs). The aim of the present study was to analyze clinical and surgical factors in patients who underwent laparoscopic cholecystectomy in a DSU, which could be determinants in deciding to discharge patients on same day or as overnight procedure.

Patients and Methods

Adult patients. LC was indicated for chronic cholelithiasis presenting uncomplicated physical status classification of American Society of Anesthesiology (ASA) I-II or III compensated, and BMI <35. Between 1997-2002 (Group A) and 2003-2010 (Group B). Clinical features, discharge rate in day hospital, causes of admission, postoperative complications, pathological studies and satisfaction index were compared for the three months between the two groups.

Results

306 patients in group A and 826 in group B were selected for laparoscopic surgery on an outpatient basis. 1.31% (Group A) versus 82.5% (Group B) were discharged without overnight stay in hospital. Symptoms as abdominal pain or nausea and vomiting were less frequent in group B. The incidence of complications was low and similar in both groups. No differences were found in the presentation of incidents within 3 months after surgery. Procedures related satisfaction was high in the 2 groups and greater in group B.

Conclusions

Day-surgery LC is an effective and safe procedure with a high level of acceptance. Serious complications are rare and occur in the immediate postoperative period, which does not limit their practice.

Patient Involvement – Feedback on impressions after day surgery

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Background

This study, involving the use of feedback via postcards, shows that patient involvement, in connection with surgical operation, contributes to ensuring the patients way through day surgery. A “write your opinion” postcard is a tool that encourages patients and their relatives to formulate their opinions and describe their experiences during their period of care within the health services. The project stems from “Safe Patient”, a cooperative effort between the Danish Society for Patient Safety and The Danish Foundation “Trygfonden”.

Method

From October to December 2011 the Day Surgery Unit handed out 300 postcards with stamped addressed envelopes to patients. The postcards were distributed to patients when they were at the Day Surgery Unit in connection with their operation. 90 postcards (30%) were returned. Responses were categorized

into 15 themes and constitute the starting point for a subsequent study in which patients elaborated on their experiences of waiting time.

Results

The results showed that patients predominantly accepted the experienced waiting time. Several patients said that waiting time was not a problem, when they had been warned of possible waiting time in advance.

Conclusion

The project provided a good insight into patient experiences during their time at the Day Surgery Unit. Moreover, it became clear that informing patients about waiting time, if this arises, is important.

Keywords Patient involvement, feedback, waiting time.

Telephone follow up after ambulatory surgery – a way to improve quality of care?

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Objective

Approximately 3500 patients annually receive day surgery at Lovisenberg Diakonale Hospital. The purpose of this project was to develop and test a structured postoperative phone assessment form that included quality indicators and the incidence of adverse events occurring 1 – 3 days after discharge.

Method

A registration form containing nine process and outcome indicators was developed based on literature review, expert recommendations and best practice. Nurses assessed levels of pain intensity, bleeding, nausea, dizziness, the administration of analgesic drugs and satisfaction with regard to pre- and postoperative information and the hospital stay overall. The patients were also specifically asked for comments and additional remarks.

Results

Data were collected for 331 patients during a one year period. Higher levels of pain intensity were reported for foot surgery compared to patients receiving other types of surgery. Data collected from 68 patients during a 3 month period showed that additional remarks contained important feedback and information regarding the treatment using a new surgical technique for varicose vein surgery. Despite high patient satisfaction scores, these remarks revealed important areas for improvement.

Conclusion

This project identified surgical patient groups for which care could be improved. For patients in the foot surgery group, new guidelines for postoperative analgesia are in preparation. Based on comments and additional remarks, a new patient information sheet has been developed which gives more accurate information to patients undergoing varicose vein surgery. Systematic standardized telephone follow up conducted by nurses is an important tool in the department's quality improvement efforts.

A multidisciplinary model of preoperative evaluation that decreases hospital visits before day surgery – a preliminary study

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Day surgery has become a standard in quality of surgical care. We therefore present a model in which the preoperative evaluation is accomplished in a single multidisciplinary hospital visit (surgeon, anesthesiologist and nurse). The patient can be referred from any hospital speciality or from the general practitioner, and additional diagnostic testing can be made the same day. This preliminary study retrospectively compares the number of hospital visits required before surgery for patients assessed at this multidisciplinary clinic (MC) and at the conventional preadmission clinic (PC), in our Ambulatory Surgery Unit (ASU). We retrospectively evaluated 176 patients admitted for general surgery at the ASU in a 6 month period

(111 patients in the MC group and 65 in the PC group). The average number of hospital visits required before admission day was 2.4 in the MC group and 3.89 in the PC group ($p < 0.001$). 9 patients in the MC group were referred directly from the general practitioner to the MC, which was the single preoperative hospital visit. Some patients required further diagnostic testing; of those, 88.5% in the MC group were tested the same day of a hospital appointment, compared to 10% in the PC group. These results demonstrate that this concept decreases the number of hospital visits required before surgery, potentially improving efficiency, reducing waiting times, and minimizing patient's work absence.

Topical Analgesia In Plastic Ambulatory Surgery

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Objectives

To evaluate the analgesic effect of ibuprofen foam dressing plus hydrocolloid net in the management of pain from the donor site skin graft and its possible usefulness in outpatient surgery procedures

Introduction

Skin grafts are frequently used by plastic surgeons. The donor site is regarded as secondary, but the pain it causes can also bring about unexpected revisions. A foam dressing (Biatain-Ibu®) has been introduced for the control of pain in ulcers. In acute wounds with little exudation the foam makes a tissue adhesion that produces pain at the change of dressing. Physiotulle® is a hydrocolloid based wound contact layer for use where there is risk of pain on dressing removal.

Methods

Twenty consecutive patients were included in a prospective study. The population included all the patients who needed a skin-graft regardless of the etiology. The patients who were allergic to NEAD were excluded. We evaluated the pain in the skin-graft donor site by visual analogue scale (VAS) at 24h and 72h postoperative and during dressing removal. Results: No patient had severe or excruciating pain at any time. VAS was higher in the first 24 hours, media 2.49 [0.3-5.9]. VAS at 72 h was 1.06 [0.00-4.4]. VAS at removal 1.93 [0.2-3.9].

Conclusions

The foam dressing with ibuprofen plus hydrocolloid helps the donor sites skin-graft pain management for the first 72 hours post-op and at the dressing removal. The hydrocolloid dressing mesh between wound and foam ibuprofen dressing does not affect the analgesia provided by the last one. This quality makes it suitable in grafted patients in ambulatory surgery.

Outpatient surgery on the hand. Report of an unusual complication

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Objectives

We report a case of digital vein thrombosis after surgery for Dupuytren's disease.

Methods

A 76 years old male patient with Dupuytren's disease on his right fifth finger (grade 3 or group II of Tubiana's classification) is operated by Skoog technique and axillar block anesthesia. Hand was immobilized with a splint as usual. Medical history: diabetes mellitus, benign prostatic hypertrophy, previously undergone operations of Dupuytren's disease in the contralateral hand. Within 48 hours of surgery the patient presented to the outpatient clinic suffering from pain and tenderness. He had a small palpable lump in the ulnar edge of the 4th finger at IPP level. This lump was in continuity of an indurated cord and redness in the area. Symptoms resolved with oral analgesics and topical heparinoids and no surgery was necessary.

Discussion

Superficial axial veins run in the subcutaneous fat of the finger and run laterally to the dorsal venous system. The internal diameter of venous arch is 0.5-1.5 mm. Thrombosis of digital veins of the hand is an entity barely described. Thrombophlebitis superficial of the back of the hand is common after the use of intravenous catheters but it is not after surgery, especially in the health finger.

Conclusion

Surgery for Dupuytren disease is usually an ambulatory procedure. Severe complications in the early postoperative period are rare. We think the case reported show resemblance to Mondor's disease.

Umbilicus and Ambulatory Surgery

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Objectives

Show our experience in umbilicus reconstruction on an outpatient basis.

Material and Methods

A retrospective study was performed on 7 patients undergoing umbilicoplasty after different procedures: ombilectomy pos basocellular tumor resection (1), pos umbilical hernia reparation (4), posbariatric abdominoplasty reconstruction (2) Anesthetic technique was local (Mepivacain 1%) plus sedation. The most common surgical technique used was “unfolded cylinder” Postoperative patients’ satisfaction and results were evaluated during the follow-up of minimum 1 year.

Discussion

Certain procedures place the umbilicus at risk thus providing a need for a neoumbilicus. Whilst of minimal functional importance, the umbilicus is a key aesthetic landmark Many

techniques have been reported for reconstruction of the umbilicus, some of them as inpatient surgery. All our patients were discharged in the same day of operation, because the drawing of the design was simple.

Results

No bleeding, contracture or flap necrosis was noted. Complete healing of the new umbilicus was achieved before a month. Reconstructing got a natural looking umbilicus All patients were pleased with the results.

Conclusion

Umbilicus absence or distortion is a frequent cause for concern and patient complaint Complications in umbilicus reconstruction procedures are rare Umbilicus restoration is an easy, sure and quickly technique which make it suitable as ambulatory surgery procedure.

Outcome of 3 years of protocol use for preventing Wrong Ambulatory surgery patient

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Objective

To determine the incidence of wrong patient surgery after implementation of a preoperative protocol in patients at an ambulatory center affiliated to a teaching hospital. Methods: A retrospective chart review was performed of 17620 cases performed on patients in the ambulatory center.

Results

There were no cases of wrong patient surgery. There were, however, 14 cases of near-misses. The near-misses were: patients without wristband, name, age, or gender inconsistent with the wristband, wristband information inconsistent with

medical record. Most wrong patient age, name origin from the patients’ relatives. Patients without wristband and patients’ personal information inconsistent with wristband had the highest frequency. Patients’ personal information had the highest consistency with surgery and anesthesia informed consent.

Conclusion

It is stressful to identify patient. Using others’ information and national customs are obstacle of identifying patients. Surgery and anesthesia informed consent is the most reliable.

Cost-effectiveness analysis of day versus inpatient surgery for tension-free Herniorrhaphy

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Objective

Day surgery is not carried out widely in Chinese mainland. The health care resources of our country are relative lack. Compare difference of efficacy, medical expenses and utilization of medical resources between day versus inpatient surgery for tension-free herniorrhaphy.

Method

Randomly divided 100 cases of unilateral inguinal hernia cases in West China Hospital From January 2010 to September 2010 into two groups, day surgery(50 cases), inpatient surgery(50 cases). Compare difference of efficacy , medical expenses and utilization of medical resources.

Result

There is no significant difference of the postoperative complications, recurrence rate, get out of bed in first day after surgery ,the time of returning to work after surgery; Compare to the inpatient group ,the average of days of hospitalization and medical expenses of day surgery are obviously lower, the difference has Statistically significant.

Conclusion

The effect of day and inpatient surgery for tension-free herniorrhaphy are the same, but day surgery cost lower, turnover quicker, so it improve utilization of medical resources, reduce economic burden, and also reduce the medical burden of the national social. So day surgery for the tension-free inguinal hernia repair should be promoted widely in Chinese mainland.

Surgical wound dehiscence, treatment idrofibra and silver. Case report

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Introduction

The authors describe a case of surgical wound dehiscence cured with advanced silver medications.

Materials and Methods

Surgical wound dehiscence with use of prosthesis in prolene for hernia in 37 year-old man without in partnership pathologies. The patient operated in urgency for median hernia from previous intervention in fifth day introduced erythema post intervention, with dehiscence of the points of suture and spillage of serum-purulent exuded. The patient was submitted in ambulatory to surgical toilet. Besides the abstersion of the wound effected with repeated washings using physiological solution and povidone - iodize to 10% of it, therefore he proceeded to application of the hollow with advanced medications. In this case it is chosen to use idrofibra with silver

(carbrossimetilcellulosa with silver). The medications were performed for the first 15 days to alternate days, subsequently every 4 days. After 20 days well formed fabric of granulation was gotten on the edges with absence of fibrina. The complete recovery was achieved after 40 days.

Discussion and Conclusions

The dehiscence of the wound represents without doubt a failure of the surgical line. Often these wounds are subject to new operation, but the use of the idrocolloidis has allowed to reduce the conspicuous loss of cutaneous substance activating the process of granulation and the migration of the fibroblastis and the macrofagis. In our case, have allowed in short times of recovery of about 10–15 days getting a complete recovery to about 40 days with acceptable aesthetes results.

Postoperative Pain of Corneal Transplantation Patients

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The purpose of this study was to examine the perceptions of postoperative eye pain for patients who underwent day surgery for corneal transplantation and to improve eye pain management practices. The patients' eye pain intensity, need for pain relief and readiness for self-management of pain were examined postoperatively through a patient survey post-op day at home and at the clinic. Pain intensity was measured with the Numerical Pain Scale (NRS 0-10). Thirty-eight (38) corneal transplantation patients participated. The questionnaire was adapted from the clinical care plan. The collected data was analyzed with the Statistical Package for Social Sciences (SPSS) Version 19.0. Eleven (11) percent of participants estimated their eye pain intensity at home to be at worst 6-7/10 and 26 percent had no pain at home within 24 hours post-op. Post-op pain medications were utilized by sixty-nine (69) percent

of participants. Fifty (50) percent of participants found non-pharmacological methods for pain management to be helpful. Fifty-three (53) percent of participants stated that take-home pain medications given by the nurses were sufficient for pain self-management at home, while thirteen (13) percent regarded them as insufficient. Twenty-nine (29) percent stated they needed more take-home pain medications on the 24-hour-post-op control visit at the clinic. According to the patients' NRS pain intensity estimates post-op eye pain was strongest at home. To relieve the post-op pain experienced at home, patients' readiness for self-management of pain should be strengthened through patient education. Dialogue should be initiated on what constitutes sufficient pain management after corneal transplantation surgery.

General Surgery Department Activity in the Day Surgery Unit: Evolution of Quality Indicators

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The knowledge of quality indicators evolution allow corrective actions to improve quality levels. General Surgery Department (GSD) provides a significant amount of patients for the Day Surgery Unit (DSU) activity. Quality indicators related to GSD procedures influence the results of overall DSU. Objective: To evaluate the evolution of GSD quality indicators rates comparing with those of overall DSU activity in a period of time.

Material and methods

Prospective study of quality indicators considered in the DSU of the Hospital of Mataró from 2003 to 2011. GSD accounts for 17% of DSU patients. The above mentioned indicators included the substitution index (>60%), patients rejected for DSU treatment (<1%), cancellations (<2%), reoperations (<0.5%), Emergency Department consultations (<5%), and admissions (<0.5%). Rates expressed in brackets represent the objective to achieve for DSU.

Results

Substitution index of DSU have been increasing from 58.3% to 64.3% with a peak in of 67.6 in 2009; for GSD, this index increased from 40.9% to 49.4% with a peak of 51.1 % in 2009 as well. Patients rejected for DSU modality were always under 1% for DSU but GSD improved results since 2007. Cancellations have been increasing for DSU and GSD until 2011, but results of GSD were better (4.5 %) in 2011. Reoperations were always under 0.5% in both. The percentage of Emergency Department consultations is higher for GSD (5.4%). Admissions rate is low for both GSD (0.5) and DSU (0.3) Conclusions: Despite providing clinical complexity, GSD results are quite similar to those obtained by overall DSU.

Simple methods for complex anal fistula treatment in the Day Surgery Unit

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The aim of the anal fistula treatment is healing the fistula tract, avoiding aggressive approaches that can condition faecal continence disturbances. We present the postoperative results of two simple surgical techniques for complex fistuli, suitable for Day Surgery Unit (DSU).

Objective

To know the immediate postoperative results of fibrin glue block and LIFT (ligation intersphincteric fistula tract) techniques performed in our Day Surgery Unit (DSU). Material and methods: From January 2005 to October 2012 we have performed 55 cases of blocking with fibrin glue over anal fistuli, and from January 2011 to October 2012, 26 cases of LIFT procedure. The group for study accounts for 81 cases. Relationship male/female was 57.7%/42.3% and mean age 48.8 (26-71) Fistuli were mainly transsphincteric, several of

them with previous drainage operation with seton technique. Patients were all them operated on under spinal anaesthesia in lithotomy position. General rules of DSU were applied pre and postoperatively. We consider the DSU quality indicators and the evolution of both techniques Results: We had not any postoperative complication except an early postoperative abscess treated 3 days after operation in the Emergency Department. Quality indicators for both procedures are in the range of those admitted in our DSU: postoperative pain over 3 < 0.5%, reoperations < 0.5%, Emergency Department consultations < 5% and admissions < 0.5%). In the last 2 years only 11 fibrin glue blocks were carried on.

Conclusions

Both procedures are excellent for DSU. Nowadays we have a tendency to use LIFT procedure because better clinical results.

Review on medium term results of percutaneous subcutaneous suture technique in laparoscopic totally extraperitoneal inguinal hernioplasty

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Aim

Laparoscopic totally extraperitoneal inguinal hernioplasty (TEP) with percutaneous subcutaneous suture (PSS) mesh fixation for high recurrent risk cases was first introduced in 2010 by Tang and Wong in Surgical Practice (2010) 14, 69-74. In this article, we reviewed the medium-term results of PSS technique when routinely applied in laparoscopic TEP.

Methods

We performed a retrospective review of 192 cases that had laparoscopic TEP inguinal hernioplasty with mesh fixation by PSS technique from 19th November 2008 to 30th November 2011 in Pok Oi Hospital in Hong Kong. Patients were followed up at surgical specialist out-patient clinic at 1 month, 4 months, 12 months post-operatively with prospective data collection in a defined template.

Results

141 patients (168 hernias) were included and 27 of them (66 hernias) were high risk cases with recurrent, bilateral and larger

hernial defect (>4cm). 87.2% were performed by specialists while 12.8 % by higher surgical trainees under supervision. The mean hospital stay was 1.6 days. Post-operatively, 2 cases (1.41%) of acute retention of urine and 17 cases (12.1%) of seroma were reported. There were 2 cases (1.4%) of minor suprapubic superficial skin infection due to PSS knots. At the median FU of 4 months, the recurrence rate after primary unilateral inguinal hernioplasty was 4.17% and the recurrence rate of high risk group was 4.55%. 28 patients (15.7%) had mild pain and 5 patients (2.8%) had moderate pain 1 month post-operatively. 2.2% of patients was noted to have chronic pain in the last follow up.

Conclusion

This alternative inexpensive PSS method of mesh fixation in laparoscopic TEP provides comparable recurrence rate and hospital stay, relatively low risk of complications and pain to conventional fixation technique. Further follow-up studies on post-operative chronic pain and recurrence would be needed to define the long-term benefits.

Is there a association between IL 6 levels, anaesthetic depth and POCD – a randomised trial?

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Postoperative cognitive dysfunction (POCD) affects more than 10% of patients over the age of 60 years and can contribute to postoperative morbidity and mortality. The aim of this study was to evaluate the influence of the depth of anaesthesia on circulatory levels of IL -6 after surgery and to evaluate the association to Mini Mental Test (MMT) score. Method: 450 patients (ASA 1-4) were included in this randomised study. In group A (AEP group) depth of anaesthesia was measured with auditory evoked potential (AEP) aimed at an A-line Autoregressive Index (AAI) between 15 and 25. In the control group (group C) DoA was monitored according to clinical signs. Cognitive function was evaluated using MMT. Inflammatory markers were measured before and after end of anaesthesia.

Results: There was a significant difference between group A and group C of IL-6 24h after surgery (table 1). Multivariate median regression analysis at 24 hours showed a significant association between IL -6 concentration, age and male sex in group A. In group C there was also a significant association between IL 6 concentration and male gender, age, but also with AAI M and cognitive function (MMT). Anaesthetic drug requirements were significantly lower in the group A than in group C (table 2). AAI values differed significantly between the groups (table 2). Conclusion: There appears to be a relationship between depth of anaesthesia, MMT score and postoperative inflammatory reaction. This suggests that increased levels of postoperative IL -6 could be an indicator of POCD.

The use of 8 indicators to measure quality in ambulatory surgery

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Introduction

The aim of this study is to determine the evolution of quality in a multidisciplinary ambulatory surgery unit using 8 different clinical indicators during a period of 17 years.

Methods

A total of 24035 patients were scheduled to be operated on from March 1995 to November 2012. The indicators monitored were:

1. Cancelled procedures.
2. Adverse events.
3. Wound infection.
4. Unplanned hospital admissions.
5. Hospital readmissions.
6. Ambulatorization index.
7. Substitution index.
8. Patient satisfaction index.

Statistical analyses were performed using Stat-View 5.1.0 software.

Results

Mean 2000 2006 2011 1.
Cancelled procedures 3.3 4.5 3.7 2.1 2.
Adverse events 11.5 8.3 11 7.5 3.
Wound infection 1.1 0.7 1.3 1 4.
Unplanned h. admissions 1.8 1.3 1 1.3 5.
Hospital readmissions 0.4 0.4 0.3 0.2 6.
Ambulatorization index 12.3 12.6 24.6 7.
Substitution index 52.2 8.
Patient satisfaction index 84.6 83.6 85.2 83.9

Conclusion

The monitored indicators show similar improvements to standards in Spain. However the specific indicators of effectiveness are under the means in our country.

Ambulatory anorectal surgery: experience from a series over 1200 patients

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Introduction

Anorectal procedures are controversial in outpatient setting. This study examines the feasibility of this type of surgery in our ambulatory unit.

Methods

A total of 1247 patients with anorectal complaints requiring surgery were scheduled to be operated on from March 1995 to November 2012. The more frequent diagnosis were sacrococcygeal pilonidal disease (SPD) (45.2%), anal fissure (21.7%), fistula-in-ano (16.2%) and hemorrhoids (12.5%). Their ages ranged from 14 to 85 years (mean 39) and 66% of them were male. Statistical analyses were performed using Stat-View 5.1.0 software.

Results

More than 75% of patients were operated on under spinal anesthesia. The more frequent procedures were lateral sphincterotomy (291), SPD excision and closure (194), SPD excision and laying open (190), SPD marsupialization (164), hemorrhoidectomy (140), fistulectomy (105) and fistulotomy (77). The average duration of the operations was 24 minutes. There weren't major postoperative complications. Urinary retention was the most common minor complication, 12.4%. Other complications were wound infection 4%, bad pain control 2.5% and bleeding 1.5%. A total of 23 patients (1.8%) needed hospital admission and 6 (0.5%) readmission.

Conclusion

Anorectal surgery can be performed in ambulatory units with safety and efficacy. The anesthesia of choice is spinal but this choice and the type of pathology provoke a high number of urinary retention. The rate of unexpected hospital admission is low.

New tools for nursing student counselling

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Jorvi Hospital is located in southern Finland being a part of Helsinki and Uusimaa University Hospital. In our Ambulatory Surgery Unit patients representing vein surgery, orthopaedics, gastroenterology, paediatrics, gynaecology, plastic surgery and endocrinology are operated. About 25 nursing students fulfil their practical training in our unit and 42 practical training weeks realized yearly. Our student tutors attended "Student counselling –course" and the idea for this development project emerged. Our aim was to update and reform nursing student counselling. A workgroup developed the starting level mapping (SLM) of the students and a check-list to strengthen the cooperation between the students and their tutors. Those tools were implemented for each student-tutor-relationship. Interviews are planned to conduct to gather the experiences

about the use of these tools. The SLM of the students and a check-list are now ready to guide collaboration between the student and the tutor. The SLM clarifies what the student already now about preoperative nursing in ambulatory surgery and what skills he/she have. Based on this the tutor plans the counselling. A check-list consisted of the most crucial facts concerning the practical training. It helps the student to reach his/her aims but also the tutor to notice all essential issues. Using both tools makes it possible to carry out the practical training successfully. As a result we have tools which help us to confirm coherent and individual practical training for each student. Student counselling has to revise because students and nursing are changing over times. New needs require new methods.

Well-being in relation to outpatient knee arthroscopy – Do the patients feel cold?

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Background

In outpatient surgery the procedures are of short duration, they are well-organised, they are standardised, and the pre-, per- and post-operative aspects are interconnected. However, the procedures pose a challenge to the professionals: how to perform individual care and secure well-being? Even though the patients as a rule are healthy and self-reliant, the hospitalisation may deprive the patients of the option of self care. It is well-known that wellbeing among other things depends on the experience of safety, lack of pain and smooth body temperature. In the present paper, we will focus on the patients' experiences of feeling cold pre and postoperatively.

Aims

The aim of this study is to highlight if the patients experience being cold during the procedures, pre-operatively as well as post-operatively. Furthermore, in a wider sense, the aim is to study what the distinctive importance of the experience means to patients who undergo ambulatory knee arthroscopy.

Methods

Using a phenomenological approach, data is collected by semi structured qualitative interviews performed immediately before discharge. The study is still in progress, 17 patients are included. Preliminary results: Some patients experience being cold. The patients' evaluation seems to reflect society's embedded norms for interaction between professionals and patients: 'Did you tell the nurse that you were cold? 'No, I wouldn't disturb.' When patients are prepared the experience seems not influencing evaluation of the procedure. Relevance to clinical practice: The nurses' clinical judgement may be strengthened and the nurses' ability to recognise how to secure well-being in relation to being cold may be improved.

Day Surgery Scheduling as a Three-station Flow Shop Scheduling Problem

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With the expanding of the day surgery in China recently, efficiency and flexibility is the key performance to evaluate the Day Surgery Center now; obviously, the best way to achieve the goal is to optimize the surgery scheduling process. Actually day surgery scheduling can be described as a flexible flow shop for its three-station of one surgery, because during a surgery, typical patient flow passes through three stages: the anesthesia preparing room (APR), operating room (OR) and anesthesia recovery room (ARR), allocating the hospital multi-resource to the three-station and deciding on the time to perform the surgeries on every stage is the key to improve the efficiency of the Day Surgery Center. This paper proposes the flow shop scheduling

problem (FSSP) which is similar to the day surgery scheduling problem to solve the three-station scheduling problem. It formulates the FSSP as a mixed integer linear programming (MILP) problem and discusses the use of the model for scheduling day surgeries with different priorities. The model is illustrated by a detailed example of Day Surgery Center of West China Hospital, and preliminary computational experiments with the MATLAB 7.0 base on the genetic algorithm design are reported. We find that optimal scheduling strategy can not only minimize the make-span of the whole day surgery process but also adjust the scheduling result in time when another priority surgery comes in.

Ambulatory surgery medical safety and patient perception survey analysis

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Objective

Investigating the safety, value perception and risk perception of the patients after ambulatory surgery.

Methods

By questionnaire survey and telephone surveys.

Results

The survey of 609 patients shows: 96.2% of ambulatory surgery patients were satisfied with the medical care, 95.9% of them were satisfied with medical treatment quality; 0.05% of them readmission after discharge, and 2.9% of them return, 64.9% of the patients realize that the ambulatory surgery model has

higher convenient value by contrast of the in-patient operation model, 49.1% of the patients realize monetary value of ambulatory surgery, 57.0% of the patients realize social value of ambulatory surgery. In risk perception aspect, 50.4% of the patients worried that they won't be treated immediately when they feel discomfort after discharge, 22.0% of the patients psychologically feel short preparation during the rehabilitation which without medical staff care.

Conclusion

Ambulatory surgery model is a secure and effective medical model. To this model, the patients have higher sense of value, but also along with the higher risk perception.

Is day surgery a safe choice for cancer mammae surgeries?

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The different surgical treatment for ca mammae includes breast conserving surgery and mastectomy with or without axillaries surgery. All patients with BMI less than 35, heart or lung condition or other co morbidity are available for day surgery. Age is not an exclusion criteria. In our clinic we have about 135 cancer mamma operations per year. Since 2005 we have done the surgeries at the day surgery department. Results: We have performed a total of 1026 surgery operation of cancer mammae in the period 2005-2011. 80% (n=821) of

them were performed as day surgery. 61% was lumpectomy, 35% was ablation and 4% included only sentinel node or axillaries surgery. 9,1% (n=75) was admitted as ambulatory after the surgery. 4,1% (n=34) of them had a medical reason for the admittance. The others were admitted because of lack of observational afternoon surveillance. Conclusion: Day surgery for cancer mamma surgery is a safe option for these patients. There is a low frequency of patients needing ambulatory admittance after day surgery.

Laparoscopic Treatment of Acute Cholecystitis – Our Experience

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Introduction

Waiting for cholecystectomy to be performed electively, patients can develop life-threatening complications. Hence, acute cholecystitis is increasingly managed by laparoscopic cholecystectomy.

Objective

The aim was to show our experience in laparoscopic treatment of acute cholecystitis in patients operated in the period between 2010 and 2012.

Methods

During this period 1080 patients underwent the gallbladder removal and 56 or 5.18% were patients with acute cholecystitis. 24 female and 32 male with acute cholecystitis operated by laparoscopic techniques were prospectively analyzed. All patients were treated with antibiotics preoperatively (Cephalosporin I.V.) and conservatively for acute cholecystitis. Median age was 43 years (from 28 to 58 years old). Endpoints included: operation time, operative and postoperative complications, conversion rates, total hospital stay and time until patients returns to full activity.

Results

Operation time was from 35 min. to 89 min. (average 62 min.). Injury of ductus choledochus appeared in 2 cases (3.57%). There were 4 postoperative complications – bleeding from gallbladder (2) and leaking bile from Luschin vessel (2). All complications were solved by conversions (10.71%). Average hospital stay was 3,5 days (2-5). Per oral consumption of food began within 24 hours in 30 patients. In period of 9 to 14 days all patients returned to normal life activity (average 11,5 days).

Conclusions

Minimally invasive procedure with four small wounds on abdomen, rapid recovery, quick return to normal life activity, almost painless procedure, acceptable conversion rate and smaller economic expenses made this procedure in our opinion a procedure of choice in treatment of acute cholecystitis.

The LMA ‘Best Practice’ revolves around size – patients at risk of getting sore throat

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Background

The Laryngeal Mask Airway (LMA) is the most utilised airway device to secure pulmonary ventilation in anaesthetised patients in day surgery. A previous study has shown that inflation of cuff volume to ‘just seal’ secures that the cuff pressure does not exceed the recommended maximum 60 cm H₂O – However in that study of 85 consecutive patients 11% were in need of a larger LMA because of ‘non seal’.

Aims

The aim of this study was to investigate whether a larger LMA applied as first choice may secure ‘just seal’ at once and may secure less volume needed to achieve ‘just seal’. . . Methods A comparative study. 85 patients receiving a LMA size as recommended by the producer LMA Unique™ is compared to 56 patients receiving a larger LMA Unique™.

Results

The median cuff volume decreased from 13 to 4. A predictor for potential sore throats post-operatively, blood on the LMA, did occur in three of the patients in the current group. Among these three patients the intubation did not succeed until in the second or third attempt. Blood on the LMA did not occur in any of the other patients in that group.

Conclusion

It is clinically relevant to consider choice of a larger LMA than recommended by the producer with the view to reduce cuff volume and cuff pressure. Furthermore a smooth cuff gives a better fit. On the basis of these results a proposal for choice of a correct size of LMA™ is formulated.

ENT Adult Ambulatory Surgery: One Year Experience

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Introduction

Ear, nose and throat (ENT) ambulatory surgery is increasing worldwide, according to the evidence of fewer complications, financial benefits and patient satisfaction [1]. The present study reviews all patients admitted to ENT ambulatory surgery during 2012 in a General and University Hospital from Portugal.

Methods

A retrospective study was conducted including all ENT ambulatory surgical patients with more than 18 years old. General comorbidities, procedures, surgical and ambulatory lengths, readmissions and associated complications were all collected. Authors used as source of information the Gllint® database and "Anesthesia Manager" PICIS®. Results. A total of 146 ENT ambulatory surgeries were considered for further analysis. The average age was 30,3 years old and 74,7% of the patients were ASA I. The most common procedures were

tonsillectomy (33%) and microlaryngoscopy suspension (33%). Balanced general anesthesia was used more frequently (64,4%). Surgical interventions in tonsils and adenoids were associated with a longer stay in the ambulatory unit, with an average of 19 hours. We found 4 post-operative early (<72 hours) complications (5,8%), all of them after tonsillectomy: 3 due to profuse bleeding which required hospital readmission (1 of them with surgical re-intervention) and 1 patient due to trismus.

Conclusion

Present results shows that ENT ambulatory surgery is a general safe procedure in the studied hospital. A window of opportunity should be continuously given to this approach because a better planning and efficiency of the operating rooms would be expected.

1. *Ann R Coll Surg Engl* 2009;**91**:147–151

Complications in Ambulatory Tonsillectomy/Adenoidectomy: Is there a difference between Adult and Pediatric Populations?

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Introduction

Ambulatory tonsillectomy and adenoidectomy is a common strategy worldwide, due to low complications rate, financial benefits and patient satisfaction. The purpose of our study was to determine if there was a difference in the incidence of complications among pediatric and adult populations in a Portuguese University Hospital.

Methods

In this retrospective study, demographic data, recovery time and complications that led to patient admission were collected. Pediatric population was defined as those younger than 18 years old. Patients with at least one of the above mentioned surgical procedures were included. Data was collected using computerized Gllint® system, and Siemens PICIS Care Suite®. Q-square test was used for statistical analysis. Results: 405 patients were selected for the study: 351 were children and 54 adults. Pediatric population had a mean age of 6,3 and 90,1% were classified as ASA I. We found 4 patients (1,1%) with

documented complications. Adult population had a mean age of 30,3 and 87% were classified as ASA I. We found 4 patients (7,4%) with documented complications. The length of stay in postoperative care unit was longer in the adult population (19 hours). After statistical analysis, the incidence of complications was found to be statistical significant between the two groups ($p=0,002$).

Conclusion

We found a higher incidence of complications in the adult population submitted to tonsillectomy and adenoidectomy in ambulatory setting, with statistical significance. From our study we conclude that adults are at a higher risk of developing complications than children and therefore may be less suited for an ambulatory surgery program.

Surgery with anaesthesia: what can the patient expect?

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Preparing patients for ambulatory surgery with anaesthesia is a challenge. The Medical Centre Alkmaar is a large top clinical hospital in the Netherlands. In the day care department, specialized in ambulatory surgery for adults and children, a priority of the preparation for surgery is to inform our patients properly. This is done by oral and written information with pictures and cartoons. However for both, adults and children, we discovered that this was not always enough so we decided to make short clear movies. This could not only take their interest but also improve the quality of preparation in having our patients well informed. These films can be seen at home before

the procedure. Anxiousness and ignorance can be reduced, wherefore an enhancement of the quality of undergoing the treatments and their recovery. Especially for children, movies seem to be the most efficient and most attractive way. Advantages of these short movies are: the movies can be seen digitally at home, at any time and as frequent as necessary. Our films are divided in different patient groups; children 3-6 years, children 6-12, children 12-18, children for ENT surgery and adults. For this occasion we demonstrate two of the films in English. All of our films can be seen in Dutch on our website: www.mca.nl/kids and www.mca.nl/operatie

Trends in Day Surgery Practice in Northern Finland: Comparing five-year-time points at Oulu University Hospital

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In Finland approximately 50% of elective surgery is done on a day surgery basis, although the national and international goal is 75%. Patient-selection will expand to include more geriatric and higher-risk-patients. This study aims to survey day surgery practice in 2012 and compare the results of our practice 5 years before, in the year 2008. **Methods** This is a retrospective observational review of all day surgery patients operated during the study years in the surgical department in a day surgery unit. The data was collected from the computerised patient information system. The study was conducted within the ethical guidelines of Oulu University Hospital (diary number 7312012). Quality indicators included patient cancellations, rates of overnight admissions, readmissions and major morbidity.

The data on patients' age, ASA-physical status, the types of surgical procedures and anaesthetic care was surveyed. Results In 2008 a total of 10910 elective patients were operated in the surgical department. Of these 3199 (29.4%) were operated on a day-surgery basis. Only 2.1% of the patients were 80 years or older, the oldest being 94 years of age. The data regarding the patients treated in 2012 is being finalized so that the direct comparison of the 2008 and 2012 year data will be presented at the time of the congress. **Discussion** The data from day surgery 2008 when compared to the day surgery outcome data of 2012 will show whether or not the current system is working to the level mandated by the international guidelines.

Analysis of Day Surgery in India: an update.

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Aim

Presenting a retrospective analysis of 2966 surgical cases, operated at One Day Surgery Centre, a Stand alone, Multi-specialty, Day Surgery Centre, in Mumbai, India. Analysis was carried out to establish the acceptance & progress of Day Surgery in India.

Material

Data collected from July 2008 to June 2012, were analysed retrospectively, of different specialities, performed purely as a Day-case: Gynaecology: 425, General Surgery: 1425, Ophthalm.: 3, Plastic Surgery: 77, ENT: 29, Ortho./Urology/ others: 157. The other 850 admissions did not fit Day Surgery Criteria. Mean average hospital stay was 6 hours.

Method

Centres is ISO 9001–2008 compliant, with SOP created specifically for Day Surgery. Case selection & criteria for patient preparation & discharge were followed as per recommendation of The Indian Association of Day Surgery. Pre-operative counselling was performed during the first consultation. The discharge process was strictly monitored & criteria are followed. Complications were explained to the patient along with post procedure instructions. Readmissions were carefully noted.

Conclusion

Results were assessed on the basis of readmission and compliance to Day Surgery, by following the Protocol laid down. There is a better acceptance in the Metropolitan city of Mumbai, to Day Surgery, with more willingness to go home on the same day of the procedure. Marketing & meticulous implementation of Protocols as a safeguard, providing a high standard of patient care, eventual will lead to acceptance increasing acceptance.

Influence of postanesthesia hypoxemia on recovery time in ambulatory electroconvulsive therapy

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Background and Purpose

Electroconvulsive therapy (ECT) is becoming frequent procedures in outpatient settings. As ECT is associated with respiratory complications such as hypoxemia, laryngospasm and aspiration, careful consideration must be given to safe and fast recovery. We investigated the incidence of oxygen desaturation in the postanesthesia care unit (PACU) and assessed the relationship between hypoxemia and recovery time in ambulatory ECT.

Patients and Methods

Forty-six outpatients (mean age: 56 years) with mental disorders who received bilateral ECT (917 procedures) were reviewed from medical record. ECT procedures were performed under general anesthesia using propofol/thiopental/sevoflurane and suxamethonium. In the PACU, oxygen was given by use of a facemask when oxygen saturation of peripheral artery fell to lower than 90%. ECT procedures were divided into two groups: oxygen group in which oxygen administration was necessary, and non-oxygen group in which patients did not receive oxygen in the PACU.

Results

Oxygen group comprised of 184 procedures (20%). The average time of oxygen supplementation was 54 min. The times from PACU admission until fluid intake (64 ± 30 vs. 51 ± 25 min., $p < 0.001$), walk (83 ± 33 , vs. 64 ± 26 min., $p < 0.001$) and discharge from the PACU (121 ± 34 vs. 106 ± 30 min., $p < 0.001$) were significantly longer in oxygen group than non-oxygen group. No patients required airway devices in the PACU and unplanned hospital admission.

Conclusions

Postanesthesia hypoxemia is a risk factor for recovery delay in ambulatory ECT.

Outpatient shoulder surgery – What is of Distinctive Importance to the Patients?

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Background

Day surgery is a routine clinical practice. In recent years, more complex operations have been included in outpatient facilities. Two years ago shoulder surgery was implemented at our outpatient facility. Compared to a previous set-up at another outpatient practice two nurse contacts were abolished. One contact before surgery and one the day after submission. We have been concerned whether the patients are able to cope at home without nurse contact, and without a caretaker present at home.

Aims

The aim of this study is to highlight what is of distinctive importance to patients who undergo ambulatory shoulder surgery. Discharging the patient does not mean that the patient is cured. The recovery phase starts at home. Patient's experience will help the professionals to tell other patients what to expect after discharge.

Methods

In our study we are using a phenomenological approach, data will be collected by semi structured qualitative phone interviews two or three days post-discharge from approximately twenty patients undergoing shoulder surgery for example rotator cuff repair or ASD (Arthroscopic Subacromial Decompression).
Relevance to clinical practice: The nurse's clinical judgement

may be strengthened and the nurse's ability to recognise how to inform the patients may be improved. The attention to teach the patients about the recovery phase will increase.

Perspectives

We expect to be able to identify focus areas in relation to information practice pre-operative as well as post-operative and improve our protocol regarding to the presence or absence of a caretaker at home the day after discharge.

The Bieri Faces Pain Scale – Great improvement for pain management among children

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Background

Studies have shown that children's pain often is inadequately treated. Standardised systematically pain-scoring among children may facilitate improved awareness of pain-management among nurses.

Aims

The aim of this study was to investigate if introduction of a standardised pain-scoring system would facilitate optimal post-operative pain-management among children aged five to twelve years?

Methods

Implementation of the Bieri Faces Pain Scale and prospective registration of post-operative pain-score. Follow up interviews among nurses and doctors.

Results

Implementation of the Bieri Faces Pain Scale addressed an issue among children who had minor surgery. 10 children in a

group of 47 (21%) expressed a pain-score ≥ 4 . A new standard for administration of paracetamol and ketorolac in that group was introduced. Subsequently in a group of 180 children the percentage with a pain intensity ≥ 4 decreased from 21% to 15%. The essence of interviews of eighteen nurses and doctors about the impact of standardized systematically pain scoring is: "My clinical judgement is strengthened and my ability to recognise signs of pain and to treat pain rapidly has improved. I have got a tool, the Bieri Faces Pain Scale, for checking my pain management. Don't remove the registration sheet from the records yet. If we don't have to document I am afraid that the attention to post operative pain management practice will decrease."

Conclusion

We find evidence to recommend implementation of a strategy to improve the quality of pain-management. Introducing and implementing the Bieri Faces Pain Scale facilitates recognition of pain-intensity and pain-treatment.

The Cost Benefit Ratio of Mobile Operating Theatres for Day Surgery Management

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Introduction

Continued pressure to facilitate and maintain waiting list targets in the English National Health Service (NHS) occasionally mandates using a mobile day surgery unit (MDSU) where limited theatre capacity exists. We have extended previous work reviewing cost viability to a wider spectrum of Day Surgery specialities to assess potential financial benefits.

Methods

12 weeks activity information was retrospectively analysed, comparing the income generated from NHS 'tariff' reimbursement. Data were collected from internal returns on day surgery activity, hire costs for the facility and staffing, and compared with the income earned from tariff payments.

Results

The operative casemix included general, orthopaedic, urological, maxillofacial and gynaecological surgery, representing typical UK practice. The unit was operational for an equivalent of 111 half day sessions. This activity generated an income to the hospital of £465,275 (€558,330). Costs of the facility, clinical staff, and consumables totalled £398,488 (€478,186). A surplus of £66,788 (€80,154) was therefore generated by the hospital. Conclusions Using an MDSU resulted in significant extra revenue for the hospital after cost deduction. There were 9 unused sessions that accrued facility and staff costs that could have generated even more income, calculated as a further net profit of approximately £34,000 (€40,800), assuming equivalent patient casemix. We conclude that the use of MDSU is cost beneficial when a wider, more typical day surgery throughput is reviewed. Further work remains to evaluate whether these same gains occur in other international funding environments for ambulatory healthcare.

Buzz the Surgeon Bee

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How does it feel for a child when there is an operation coming? What can we as professionals do to help a child to adjust to the hospital day as well as possible? How can we prevent any unpleasant fears the child might have towards hospitals? These phrases made us think more specific our pediatric nursing in day surgery unit. So Buzz the Surgeon Bee was born. Buzz the Surgeon Bee has been designed to ease child patients fear of hospitals and to soothe their anxiety. With the aid of Buzz parents can prepare their child for their day at the Day Surgery. Buzz is introduced in the invitation letter not only as a picture but also by way of a short fairy tale. The parents also receive a

guidance letter in which the preparations, the day at the surgery, parents involvement in the treatment of their child, discharge from the hospital and other practical issues are explained in a more detailed manner. The terms we use during operation day have been standardised so that the whole staff uses the same terms and this way improve the child's understanding of previously explained things. Buzz the Surgeon Bee greets child patients already at the hospital door. Children are expected to search for different pictures of Buzz and this way move forward along their treatment path. Maj-Britt Tallbacka-Männistö & Hanna Ohrimovtisch

Single Syringe Propofol-Remifentanil TIVA - A Case Series

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Single Syringe Propofol-Remifentanil TIVA- A Case Series Total Intravenous Anaesthesia (TIVA) is often done with separate syringes of propofol and remifentanil, using a TCI pump. Mixing the propofol and remifentanil in a single syringe, using a non-TCI pump, can offer optimal anaesthesia with good operating conditions, rapid emergence and a brief PACU stay. This technique is used in 10 ASA I & II patients, coming for ambulatory breast lump surgeries. 150mcg of remifentanil is added to 200mg of propofol in a single syringe. With this TIVA mixture being infused concurrently at 2ml/kg/hr, the patient is induced with a bolus of plain propofol titrated to loss of consciousness. After insertion of the laryngeal mask airway(LMA), the rate is reduced to 1ml/kg/hr for 5 min.

The rate is then reduced by 0.2ml/kg/hr every 5 min and maintained at 0.6ml/kg/hr. Patients' reaction to surgical stimuli is treated with 1ml boluses of the TIVA mixture and an increase of the infusion rate by 0.2ml/kg/hr. If local anaesthetic is infiltrated before skin closure, the infusion rate is reduced to 0.4ml/kg/hr. The infusion is switched off at the last stitch. The highest BIS scores ranged from 55 to 66. No patient was aware. Operating conditions were graded "Good" in all patients. Mean time for eye opening is 4.5 min from when the infusion is stopped. The LMA is removed inside theatre and the mean stay in the recovery area is 10min. Thus, this single syringe mixture technique is a feasible way of administering TIVA.

Day Surgery Scheduling as a Three-station Flow Shop Scheduling Problem

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With the expanding of the day surgery in China recently, efficiency and flexibility is the key performance to evaluate the Day Surgery Center now; obviously, the best way to achieve the goal is to optimize the surgery scheduling process. Actually day surgery scheduling can be described as a flexible flow shop for its three-station of one surgery, because during a surgery, typical patient flow passes through three stages: the anesthesia preparing room (APR), operating room (OR) and anesthesia recovery room (ARR), allocating the hospital multi-resource to the three-station and deciding on the time to perform the surgeries on every stage is the key to improve the efficiency of the Day Surgery Center. This paper proposes the flow shop scheduling

problem (FSSP) which is similar to the day surgery scheduling problem to solve the three-station scheduling problem. It formulates the FSSP as a mixed integer linear programming (MILP) problem and discusses the use of the model for scheduling day surgeries with different priorities. The model is illustrated by a detailed example of Day Surgery Center of West China Hospital, and preliminary computational experiments with the MATLAB 7.0 base on the genetic algorithm design are reported. We find that optimal scheduling strategy can not only minimize the make-span of the whole day surgery process but also adjust the scheduling result in time when another priority surgery comes in.

Sedation for painful procedures by non-anesthesiologists

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Background

There is an increasing demand for sedation in patients undergoing interventional procedures in a day care setting. Due to shortage of anesthesiologists, even moderate to deep sedation is increasingly performed by non-anesthesiologists.

Methods

In 2006, a pilot project was started at the Academic Medical Center AMC Amsterdam to train nurse anesthetists to perform moderate and deep sedation using propofol. The program involves both, theoretical and practical training under direct and indirect supervision of an anesthesiologist and takes 1 year of post graduate education.

Results

Until 2012, a total of 145 nurse anesthetists successfully completed this program in the Netherlands. The AMC started with 4 certified sedation specialists in 2007, this group grew to a number of 19 in 2012 and none of the certified specialists left

the hospital until today. The demand of the Gastro-Enterology department for moderate to deep sedation raced from 2 to 18 half day sessions/week, and the work was extended to interventional radiologic, pulmonologic and cardiologic procedures and includes patients of ASA categories 1-4. Introduction of deep sedation using propofol by specialized nurses abolished the necessity of reanimation calls in the respective specialties. Registration of complications using a modified Adverse Event Reporting tool of the World SIVA International Sedation Task Force has recently been introduced and allows determining safety aspects and identifying topics accessible for further improvement.

Conclusion

Moderate to deep sedation by non-anesthesiologists using propofol only under indirect supervision of an anesthesiologist is safely performed after adequate training and specialisation of anesthesia nurses.

The Influence of Mask Ventilation on Post Operative Nausea and Vomiting

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It is a well-known fact that air in the ventricle can cause nausea. We will with this trial try to diminish the incidence of PONV after surgery. We present the design for an ongoing study in our department. This study investigates the possibility of changing the outcome for gynaecological outpatients who are undergoing surgery. We will investigate if patients who are not ventilated with a face mask before the laryngeal mask is placed in hypopharynx will experience less PONV than patients who are ventilated with a face mask. This study is designed as a randomized controlled trial. We have 2 groups of patients with 80 patients in each group. The first group consists of patients

ventilated with a face mask before the laryngeal mask is placed in the hypopharynx. The second group consists of patients not ventilated before the laryngeal mask is placed. All patients are subjected to total intravenous anaesthesia (TIVA) using Propofol and Remifentanyl for general anaesthesia. All patients receive standardised medication for postoperative analgesia. All patients receive written instructions on how to use the VAS scale. After discharge they will be interviewed and asked to evaluate pain and nausea according to the VAS scale. They will receive a questionnaire which must be returned to the nurse when they are completed.

Comparison of Deep Sedation and Moderate Sedation during Upper Gastrointestinal Endoscopy in Inpatients with Complications

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Background

Few studies suggested a proper sedation stage for endoscopic procedures in inpatients with high risks. Our purpose of this study was to compare safety and efficacy of deep sedation and moderate sedation during upper gastrointestinal endoscopy in inpatients with systemic complications.

Materials and methods

One hundred nineteen inpatients with complications and ASA physical status II-III were randomized to three groups. Patients in Group I (n=39) were sedated to moderate sedation with midazolam and sufentanil. Patients in Group II (n=40) were sedated to deep sedation with sufentanil and propofol. Patients in Group III (n=40) were sedated to deep sedation with sufentanil, midazolam and propofol. Vital signs, patients' comfortability, endoscopists' and patients' satisfaction, and sedation-related adverse events were recorded. Statistical methods included analysis of variance (ANOVA) and the chi-square test. $P < 0.05$ was considered significant.

Results

Moderate sedation can significantly shorten sedation time and recovery time. The incidence of sedation-related adverse event in group I was lower than that in group II and III. Compared with group III, patients in group II presented a higher incidence of sedation-related adverse events. No patient experienced a procedure-related adverse event. Although, patients' comfortability was lower in group I than that in group II and III. Patients' and endoscopists' satisfaction was excellent and there was no statistical difference among all three groups.

Conclusion(s)

For most inpatients with complications, upper gastrointestinal endoscopy can be performed successfully with either moderate or deep sedation; however, moderate sedation is safer than deep sedation.

Preoperative intravenous parecoxib reduce length of stay on ambulatory laparoscopic cholecystectomy

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Background

The complexity of pain from laparoscopic cholecystectomy and the need for treating incidental pain need multi-module analgesia. Opioids are widely used for postoperative pain but with numerous adverse effects. We investigated the preoperative administration of parecoxib as to replace opioids for pain after ambulatory laparoscopic cholecystectomy.

Methods

A prospective, double-blind, randomized, placebo-controlled study was conducted on 120 patients who underwent ambulatory laparoscopic cholecystectomy under general anesthesia. Patients were randomized to receive either 40 mg parecoxib infusion 30-45 min before induction of anesthesia and 4ml saline infusion when gallbladder is removed (group A); or 4ml saline infusion 30-45 min before induction of anesthesia and 40 mg parecoxib infusion when gallbladder is removed (group B); or 4ml saline infusion 30-45 min before induction of anesthesia and 4ml saline infusion when gallbladder is removed (group C). Times to modified Aldrete's score and modified Post-Anesthetic Discharge Scoring System (PADSS) >9 and postoperative adverse effects were recorded. The degree of the postoperative pain was assessed in the first 24h after surgery using a visual analog scale.

Results

Patients in group A had a shorter length of stay (32.43 ± 7.229 min) in the post-anesthesia care unit compared with group B (39.08 ± 10.388 min), and group C (42.24 ± 7.596 min). Patients in group A also had a shorter discharge time (143.51 ± 41.313 min) compared with group B (187.89 ± 47.656 min), and group C (216.32 ± 54.546 min). Moreover patients in group A had reduced pain intensity, less postoperative adverse reaction, less additional analgesic, and expressed greater satisfaction.

Conclusion

Preoperative administration of parecoxib provided significant effect on reducing PACU stay and discharge time, improving patient outcome after ambulatory laparoscopic cholecystectomy.

Explorative study of cognitive recovery during PACU-stay: A study in four centres comparing two techniques for score evaluation of PoQRs cognitive questions

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Objective assessment of recovery in order to secure safety after anaesthesia for ambulatory surgery is of importance. The aim of the present observational study was to assess cognitive recovery with the Postoperative Quality of Recovery Scale cognitive domain questions at 30 and 90-minutes after general anaesthesia using the classical and modified technique for assessment of recovered. One hundred-and-seven ASA 1-2 patients scheduled for general anaesthesia for ambulatory or short stay surgery at four different operating departments were studied. All patients responded to the 5 questions for assessment of cognitive performance in the PoQR scale preoperatively as base-line and at two occasions during the stay in the recovery room 30 and 90 minutes after end of anaesthesia. Assessment was done by the classical scoring or by the modified score

assessment suggested by Roysel. We found a significant difference in number of patients assessed as cognitively recovered when using the two different assessment techniques; classic assessment revealed 10 and 31 patients as cognitively recovered at 30 and 90 minutes and the modified technique 40 and 75 respectively ($p < 0.001$). Also when looking at recovery over time, the recovery progress from 30 to 90 minutes a significant difference between the 2 assessment techniques was found. Overall two third of all patients reached cognitive recovered at 90 minutes with only small non-significant differences between the 4 different departments studied. Cognitive recovery is rapid after ambulatory anaesthesia, the modified assessment technique seems to provide a seemingly more accurate and dynamic assessment of the cognitive recovery process.

Quality Management in Ambulatory Laparoscopic Cholecystectomy – initial experience in West China Hospital

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The ambulatory surgery has gradually expanded through hospitals in China in recent years. Ambulatory surgery center at West China Hospital, Sichuan University was set up in 1999. Ambulatory laparoscopic cholecystectomy (LC) program was initiated on January, 2011. For patients, ambulatory LC can decrease medical cost, shorten operation waiting time and sick leave, avoid possible nosocomial infection. However, With the

characteristic of short stay and fast discharge, It is reasonable to consider that ambulatory LC might have higher risks on quality and patient safety. Quality management becomes a key factor for successful ambulatory surgery. In view of our ambulatory LC program, we conclude that its success depends on appropriate patient selection and on well-trained staff and enforced quality control measures together with safe anesthesia.

The comparison of Ambulatory Laparoscopic cholecystectomy with In Hospital Laparoscopic cholecystectomy

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Background

The volume of surgical procedures performed in ambulatory surgical centers has increased rapidly in China. Most of those procedures were minor operations. It is still controversy whether laparoscopic cholecystectomy is safe to be performed as an ambulatory surgery. Our study is aimed to compare morbidity, mortality, length of stay (LOS) and cost after ambulatory laparoscopic cholecystectomy (LC) versus in hospital laparoscopic cholecystectomy.

Methods

From March 2011 to December 2012 there were 2212 patients with the diagnose of cholecystolithiasis or cholecystic polypus have under taken laparoscopic cholecystectomy. In which 1534 cases were inpatients (in hospital LC group) and 678 cases were

outpatients (ambulatory LC group). The patients with common bile duct stones, pancreatitis and other complication were excluded. morbidity, mortality, rate of conversion to open, length of stay and cost were analyzed.

Results

Demographics for both groups were similar. When comparing ambulatory LC with in hospital LC, the morbidity and mortality rates were comparable (0.15% vs 0.2%, P=NS), the rate of conversion to open was lower (0.44% vs 3.19%, P<0.05), the LOS was shorter (1.2 ± 0.5 d vs 4.8 ± 1.3 d, P<0.05) and the cost was lower (6555.6 ± 738.7 yuan vs 7863.7 ± 1014.6 yuan, P<0.05). Conclusion. Ambulatory LC is more economical than in hospital LC, without increasing perioperative risks.

Mobile phone short message service reminders can improve the compliance of outpatients for sedation gastrointestinal endoscopy: a randomized controlled trial

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Objective

To investigate whether short message service (SMS) reminders can improve the compliance of outpatients for sedation gastrointestinal endoscopy.

Methods

Outpatients scheduled for a gastrointestinal endoscopy were randomly assigned to a mobile phone SMS group or control group. The patients in the control group received leaflets, while the patients in the SMS group received daily SMS reminders on their mobile phones. The contents of text message were the same as the leaflets except that the patients in the SMS group could receive the reminding of the appointment time before the day of examination. The patients' compliance and satisfaction were assessed in the waiting room by an investigator who was blinded to patients' allocation on the day of examination.

Result

A total of 811 patients were enrolled in this study. 407 patients were in the SMS group and 404 patients were in the control group. There was no significant difference in nonattendance rate and attendance rate between groups. Compared to the SMS group, the cancellation rate of hypertension was higher in control group (0 vs 1.5%, $p=0.041$), and the cancellation rate of without enough fasting time was also higher in the control group (2% vs 4.9%, $p=0.033$). The satisfaction of patients was higher in the SMS group compared to the control group (97.7% vs 95.1%, $p=0.03$). Conclusions: SMS is an effective method to improve the compliance of patients for sedation gastrointestinal endoscopy.

Effect of mobile phone short message service reminders on outpatient's satisfaction and anxiety

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Objective

To investigate whether short message service (SMS) reminders can improve the degree of satisfaction and reduce preoperative anxiety in the patients scheduled for sedation gastrointestinal endoscopy.

Methods

Patients ($n=532$) aged 16-60 admitted to a gastrointestinal endoscopy were randomly assigned to either mobile phone SMS group or control group. The patients in the control group received leaflets, while the patients in the SMS group received daily SMS reminders on their mobile phones. The contents of text message were the same as the leaflets. Satisfaction and anxiety were assessed in the waiting room by an investigator who was blinded to patients' allocation on the day of examination. Data was analyzed using rank-sum test, T-test and chi-square test by SPSS18.0.

Result

Compared to control group, patients in SMS group were statistically more satisfied ($z=-2.877$ $p=0.004$). The exploration of relevant factors found that patients who were female, younger, well-educated, and receiving endoscopy for the first time were more likely to have anxiety ($p=0.000, 0.000, 0.023, 0.000$). Patients in SMS group had lower level of anxiety, but there was no significant difference between two groups. Patients without anxiety in SMS group were less than patients in the control group ($n=128$ vs 97 , $p=0.048$).

Conclusions

SMS is effective in improving the satisfaction of outpatients, and can reduce the preoperative anxiety.

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