5. Quality

Oral presentations

64 Suitability for outpatient femoral angiographies

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

Purpose: To evaluate the in-patient procedures to check its feasibility for outpatient procedures at Kettering General hospital NHS Trust.

Methods: Prospective analysis of 50 case notes of patients in whom femoral angiography, angioplasty or stenting procedure performed over a period of 3 months.

Results: The results are far better for all criteria set before the study except the criteria for procedures done before noon.

Conclusion: With newer technical equipment arteriography can be performed safely on an outpatient basis with cost savings for the community and high degree of patient satisfaction. However local O.P. or Vascular Nurse should follow all patients within 1 week to rule out fatal complications like retroperitoneal haematoma.

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

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

Introduction: The treatment of patients with abscesses on a day care basis has been shown to be cost effective [1]. Patients presenting to our hospital with an abscess requiring incision and drainage had a mean average stay of 3.3 days following inpatient admission. We initiated a day surgery abscess pathway to reduce length of patient stay in hospital and improve patient satisfaction. Our study evaluates the efficiency and utilization of this pathway.

Methods: Patients with abscesses presenting to our hospital emergency assessment unit (EAU) between 08:00 and 16:30 hours are assessed by a surgical registrar. If incision and drainage of the abscess is needed, preliminary screening is carried out by a nurse in EAU using a questionnaire. Patients deemed suitable are prescribed antibiotics and analgesics before being referred to the surgical day unit (SDU) for a full preoperative assessment. If SDU criteria (age >1 year, ASA 1/2, Body Mass Index <35) are met, patients are allocated a slot at the end of a consultant general surgeon's list the following day. Our study group comprised 20 patients treated via the day surgery abscess pathway over a 4 month period. The control group consisted of 65 patients with abscesses treated conventionally as inpatients during the same period.

Results:

<table>
<thead>
<tr>
<th></th>
<th>Study Group (Abscess pathway)</th>
<th>Control Group (Inpatients)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Number of patients</td>
<td>20</td>
<td>65</td>
</tr>
<tr>
<td>Age (average/median)</td>
<td>38 (7-75)</td>
<td>35 (16-71)</td>
</tr>
<tr>
<td>Sex (male/female)</td>
<td>7/13</td>
<td>31/34</td>
</tr>
<tr>
<td>Average length of stay in EAU (hours)</td>
<td>2</td>
<td>5</td>
</tr>
<tr>
<td>Average length of stay in hospital (hours)</td>
<td>7.5</td>
<td>27.5</td>
</tr>
</tbody>
</table>

Three patients in the study group had pilonidal sinus excision as an additional procedure Postoperatively, 1 study group patient was admitted overnight from the SDU for excessive drowsiness.

Discussion: Patients in the study group show a marked reduction in their duration of stay both in the EAU and hospital, confirming the efficiency of our abscess pathway. Patient satisfaction is increased due to shorter treatment times. In addition surgery is carried out by a consultant surgeon who is capable of performing additional procedures as required. Allocating patients a slot at the end of an elective SDU list provides flexibility without compromising usage of the list. Limitations of our abscess pathway include a lack of SDU general surgery lists on Thursdays and the inability of nursing staff to assess patients outside working hours of the SDU. Also, we currently do not undertake day surgery on insulin-dependent diabetic patients.

Conclusion: The day surgery abscess pathway in our hospital provides an efficient way of managing patients with abscesses requiring incision and drainage. Utilization of the pathway could be improved by expanding patient selection criteria.

References


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

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

AQS1 is designed as a questionnaire system to study and to measure the quality of medical care during an following ambulatory surgery and to study the satisfaction of the patient. First part of the protocol is to be answered by the surgeon and the anaesthesiologist. In the second part the patient is requested to give his feedback. AQS1 records the complete process of the ambulatory surgery. That means that patient's questionnaire contains information from the first up-front contact to the receptionist until the period of recovering at home – including e.g. postoperative pain or complications. The surgeon and the anaesthesiologist record their work during the surgery till the patient leaves the recovery room. All this information is collected in one database. Every three months the data are analyzed and presented in a standard sized report. The single results of every outpatient clinic are compared with the complete group of study members (all outpatient clinics). The aspect of benchmark is important to identify and to solve problems in the clinical pathway and on the other hand to recognize facilities above average. Further on diagnose (ICD 10) or procedure (OPS 3.01) related groups are analyzed e.g. in aspect of infection rate, incidence of thrombosis, percentage of secondary hospitalisation and more.

Since 1999 the AQS1 system is used in Germany as a daily medical routine in many outpatient clinics and also to evaluate patients outcome in special projects of medical associations (BAO) and insurances. The database contains 2004 data of more than 40,000 ambulatory surgeries – we are able to present outcome data of different specialties like Orthopaedic Surgery, General Surgery, Gynaecology, Urology, etc.

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

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

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

did evaluate the care and course of their treatment by Internet based questionnaire.

The project group: Head Nurse Jane Elge, leading anesthetist Jan Bjorn Nielsen, the Department of anesthesiology. Specialist of diseases of the shoulder, Gerhardt Teichert, Department of orthopedic surgery. Department nurse Birgitte Nielsen and nurse Helle Flodager Stevens, Department of Day Surgery. Nurse Kirsten Held, department of anesthetists.

Introduction: Shoulder surgery is well suited for Day Surgery. Previous reports and projects from the department of Day Surgery indicate that the treatment for pain has not been sufficient. The project of development and quality improvement is based on improvement regarding the treatment of postoperative pain on patients, who have had shoulder arthroscopy (decompression or lateral clavicle resection.) Local anesthesia used with “Pain Buster” pain catheter is a supplement of a traditional pain treatment. Other papers confirm the applicability of “Pain Buster” catheter. The procedure is that the patients themselves disconnect the “Pain Buster” pain catheter after 48 hours.

The intention of the study is to show whether the actual treatment of pain, in combination with the “Pain Buster” pain catheter, will better the option for treatment to patients having operations of the shoulder at the Department of Day Surgery. The pain catheter is placed percutaneously into the subacromial space, and the “Pain Buster” reservoir is filled with 100 ml 0.25% bupivacaine. The patients also have a suprapubic block combined with a subacromial injection with a total amount of 20 ml 5% bupivacaine/adrenaline.

In previous reports and projects, the Department of Day Surgery has tested the effect of this present pain treatment of patients with shoulder operations with theVAS scoring system, which forms the base for this project. In our previous report we concluded that 36% of the patients had a VAS score more than 4, on the day of operation, and on the following day after the operation 50% of the patients had a VAS score that was more than 4. The applied drugs were: paracetamol p.o, tenoxicam p.o, Caps oxycodehydrochloride p.o, tablets oxycodehydrochloride p.o, ketorolac i.v.

These drugs form the base of the present pain treatment with “Pain Buster” pain catheter as a supplement. Goals:

1. To develop a pain treatment, which is effective and free of complications and applicable in the postoperative treatment of patients operated in the department for day surgery.
2. That the patients are as free of pain as possible scoring less than 4 on the VAS scale.
3. That the patients feel confident, about going home with the catheter, which must be removed by the patients themselves.
4. The Internet is used to complete the questionnaire. Data are collected into a base where patients score themselves with the VAS scoring system.

Nursing Intervention: That the patients by means of purposeful information follows the planned postoperative pain treatment after the discharge from the Department of Day Surgery. So that the patients feel well informed. That the patients by follow-up telephone interviews on the first and the third day are supported and guided through the postoperative pain treatment, and that all the unpleasant events with “Pain Buster” pain catheter will be recorded. That the patients feel confident, about going home with the catheter, which must be removed by the patients themselves.

Material and Method: The project of development and quality improvement is planned as a prospective test with a retrospective control group. 22 patients from the previous project of pain treatment are going to be compared to 40 patients from the “Pain Buster” project.

Inclusion criteria:

- Shoulder arthroscopy, either as decompression or a clavicle resection with the patient in the lateral position with his upper arm extended.
- Cryocuff or ice bag
- General anaesthesia
- ASA 1 and 2

Exclusion criteria: Lack of patient’s compliance in co-operating.

Result: The results will be ready during February 2005. It is our hope, that the patients will have a lower pain score after treatment with “Pain Buster” catheter.

Future Perspectives: Pain treatment with the use of “Pain Buster” pain catheter may be the start of extending the group of patients fit for day surgery treatment. Using the internet-based questionnaires it might be possible to alter procedures and adjust patient care according to current data. The results from the report will be available via the Internet. The quality assessment will be used for clinical guidelines to be applied at the department for day surgery.

88 Day case laparoscopic cholecystectomy

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

The aim was to share the initial experience of DC-LC at the unit and is presented as an audit loop.

Patients and Methods: Over a 32-month period, 164 patients were observed. First 112 patients (Group A) retrospectively in an observational manner and the next 52 (Group B) as prospectively (interventional). Apart from the number, the demographic data of the two groups was comparable. For Groups A/B, the median age was 41.45 y, M:F ratio 1:5:1:6. ASA I-II/III. Pts >55 y were 36 (32%) in Group A and 20 (38%) in Group B.

Standard laparoscopic cholecystectomy was performed. All patients had anti-DVT prophylaxis (pneumatic compression and enoxaparin), per-operative antibiotic, oro-gastric tube, paracetamole suppository and local anaesthetic to all wounds. They were discharged the same day. The end point was 6 weeks follow-up (86% overall).

Results: The direct admission rate (DAR) was 20% for Group A and 6% for Group B. Increased confidence among nurses and judgement-based discharges of patients were contributory. This did not result in higher re-admission rate. The ‘unavoidable causes’ included suction drain (2/23), operation in the afternoon (2/23), and recent biliary pancreatitis (1/23). In Group B there were 2 conversions. In the first phase (Group A) patients >55 years had one in three chances of requiring unplanned admission. This association was not seen in Group B. The proportion of re-admitted patients was comparable (3.5% vs 4%). Satisfaction level was 100%.

Conclusion: DC-LC is safe and feasible. No definite predictors of direct admissions were found. The importance of audit as a clinical tool was highlighted.

89 Results from a 4-year day surgery unit practice


Background and Goal of Study: All clinical practice should be attentively evaluated in order to achieve the best possible performances. We analysed the last 4-year practice at our day surgery unit (DSU) based on clinical indicators. The goal of this study is to identify situations susceptible of improvement in our ambulatory surgery programme.

Materials and Methods: We did a transversal analysis using our database that included 5134 patients operated at our DSU between 1st January 2001 and 31st December 2004. Several variables were analysed: age, physical status (ASA) higher than II, more complex surgery, failure to admit, cancelled or postponed surgery, return to the operating room, unplanned overnight admission, pretending to study their evolution during the last 4 years.

Results: See the table.

Discussion: With an aged population, characterized by growing associated medical problems, and performing more complex surgery, we are improving our day surgery programme with better performances: safer, more effective and more efficient in our results. Nevertheless,
Driving restrictions following general anaesthetic day surgery

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

This study investigates patients' knowledge of post-operative driving restrictions following general anaesthetic day surgery. In addition, the paper will analyse patient compliance with recommendations following discharge.

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

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

M. Tricker. Hospital Toowoomba Surgicentre, Queensland, Australia

I will be presenting the Toowoomba Surgicentre's study to the child up to the age of 14 years having tonsillectomy in Day Surgery. That is the patient spends about six hours in the facility. We started doing tonsillectomies in 1987 and have performed over 1200 procedures. The first eleven years was with the laser and since 1998 we have been using diathermy. There have been very few admissions to hospital.

We must provide care to the patient and parents from the time of the decision to have the procedure. How do the parents feel when they are told how long they will be away from the child and that they will accompany the child to theatre and support them till they are asleep. They are informed of when the child will be returned to them and resume the care. All this information is repeated on admission. They are given written and verbal instructions on the care post discharge in third stage. The complications and what to do and the importance of keeping up the fluids and food intake are all explained. Last, the parents are given the location of their nearest hospital if they are worried about the child.

Presently, I am conducting phone interviews of all tonsillectomy patients. The study group patients on the eight day post-operatively to obtain the level of satisfaction the parents have of the education and information that was given to them. Our protocol is to ring the parents the night of surgery and the next day. I am finding that the parents appreciate this phone call on the later date as they have had time to access the education. The parents are able to give me a comprehensive view of the facility and the ability of the staff which may result in a change to are education information.

Evaluation of the efficiency of a day surgery knee trauma list

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

Aim: To evaluate the efficiency of a dedicated day surgery list for acute knee trauma requiring arthroscopy.

Introduction: Patients with acute knee trauma may require arthroscopy. Traditionally in our hospital this has been done as in-patient on a regular trauma list. We introduced a dedicated day surgery knee trauma list with the aim of reducing in-patient admissions, patient waiting time and costs. Our study evaluated the efficiency of this list.

Methods and Results: The study group was a retrospective review of patients undergoing arthroscopy on the day surgery knee trauma list in the first 8 months of its inception versus a control group of in-patients undergoing arthroscopy on a trauma list in a 8 month period prior to the introduction of the day surgery list. The control group patients (n =49) were admitted as in-patients from the fracture clinic and awaited surgery on the trauma list. Three of these patients required a repeat arthroscopy while 13 patients were operated on 'out-of-hours' (i.e. after 17:30hrs). The average stay in hospital was 2.5 days. The study group patients (n =53) were first seen in a fracture clinic and then referred onward to the knee unit team. If arthroscopy was deemed necessary, patients were booked onto the day surgery knee trauma list after pre-assessment by the nursing staff. Surgical criteria were: locked knees secondary to meniscal tears, loose bodies/cruciate ligament ruptures, acute osteochondral fractures and children with acute meniscal tears. Patient criteria were: ASA grade 1 or 2, age > 1 year and body mass index (BMI) <35.

Elective patients could be called in at short notice to ensure optimal theatre utilisation. The number of significant procedures carried out were: meniscal repairs - 5, re-fixation of osteochondral fragments - 3, partial meniscectomy - 20 and diagnosis of anterior cruciate ligament rupture - 5. None of these patients were admitted overnight. The average cost for a patient undergoing arthroscopy in our hospital as a day case is £807 (€1170) compared to £872 (€1260) as an in-patient during normal hours (09:00-17:30 hrs) rising to £958 (€1390) for out-of-hours surgery. The cost of an overnight stay on the ward is £230 (£330). As a majority of the control group patients spent an average of 2.5 days in hospital, the implementation of the day surgery list saved an average of £645 (£935) per patient treated (£726, £1050 for out-of-hours).

Discussion: Patient satisfaction increased, due to minimal disruption from familiar surroundings and assured operating times. Quality of treatment provided improved as the availability of specialist surgeons for the day surgery knee trauma list reduced re-operation rates. Skills of theatre staff were enhanced by regular exposure to specialized equipment needed for complex arthroscopic procedures. Increased cost efficiency per patient episode.

Conclusion: A dedicated day surgery trauma list has proved to be a very efficient method of managing knee trauma patients requiring arthroscopy.
A retrospective examination of one US surgery center's success at improving patient throughput using a computer assisted, nurse led pre-operative screening system

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

Objective: The safety of ambulatory surgery relies heavily on the pre-screening process. In the USA, the traditional pre-operative clinic has been replaced by a nurse led phone call system. Because the quality of this call can vary, many facilities have adopted overly stringent guidelines. The Surgery Center of Maryland opened in 1997. For the first three years of operation, the center used a nurse led phone call system with stringent guidelines. This resulted in an average of 300 patient (10%) denials per year.

Methods: In early 2001, the center changed three key aspects of the pre-op screening process. With guidance from the anesthesia group, the center adopted open guidelines. The decision of patient suitability now being the center's responsibility. Next, the center hired one full-time phone call nurse. Finally, the center went from using basic screening questions to adopting an anesthesia focused screening record. This same record was placed on the nurse's computer screen using the Acrobat Reader program. The program allows the nurse to move the cursor over certain medical conditions to reveal a list of more detailed information or questions.

Results: By 2004, the Surgery Center of Maryland has been able to increase volume to 5000 patients per year and have reduced denials to less than 1 percent.

Conclusion: Since adopting this new protocol, the quality of the screening process has improved. Because of the open guidelines, the nurse encountered patients with significant medical issues. However, the improved computerized form allowed the nurse to explore the issues in greater detail.

Postdischarge patient quality after ambulatory haemorrhoidectomy

K. Hjernann, Ulleval University Hospital, Oslo, Norway

Methods: The patients were operated with Milligan procedure. Anesthetic technique: remifentanil + propofol i.v. (sedation), supplemented with local anesthesia. Paracetamol, rofecoxib and dexamethasone were given for pain prophylaxis. When discharged, the patients were given a standardised form to write down their experience of pain (VAS 0-10), and need of analgesics during the first 6 days. The patients were also interviewed by a standardized telephone questionnaire 6 days and 6 weeks after surgery.

Results: During 6 months, 50 consecutive patients were included in the study, 37 females and 13 males. The mean VAS score for pain increased from 2.4 (day 1), to 4.6 (day 6). Although available, the patients did not take full benefit of the oral analgesics supplied (paracetamol, rofecoxib and codeine). 17 patients (34%) had nausea or vomiting. 2 patients described postoperative bleeding as "a lot". 27 patients (54%) felt constipated, 39 patients (78%) used laxatives as prescribed. The first 6 weeks, 17 patients contacted the unit, 27 their private doctor. 31 patients had a better or similar total experience compared to what they had expected, 19 (38%) had a worse experience, mostly related to postoperative pain. When leaving the hospital, only 3 patients were not satisfied with the information, but 6 weeks later 11 patients felt the information was insufficient. Conclusions: The study did not reveal any serious or dangerous problems. However, the pain-scores after day 1 are too high, the patients must be encouraged to take more analgesics. It is also necessary to focus further on better patient information, in order to improve the quality and reduce the high number of post-discharge calls to health care providers.

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

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

Introduction: Complications associated with Sleep Apnea (SA) and related syndromes can present significant morbidity and mortality for patients undergoing outpatient (same-day) surgical procedures. Such complications include hypoxemia or hypoxia, cardiac arrhythmias, pulmonary edema, and death.

Objective: To conduct a retrospective review of 2300 cases performed in free-standing outpatient centers for a period of twelve months, with emphasis on patients diagnosed with obstructive SA. Deviations from routine perioperative care were noted.

Methods: 2300 patient records were reviewed and the diagnosis of obstructive SA noted. Records were assessed for the following perioperative care deviations/complications: 1. Need for rescue from hypoxemia by pharmacologic interventions. 2. Airway manipulation leading to prolonged placement of artificial airways. 3. Need to transfer to a tertiary care institution, and 4. Death. Anesthetic techniques received by these patients ranged from minimal sedation to general anesthesia, with agents limited to propofol, in combination with fentanyl and/or midazolam.

Results: Data reviewed showed that 89 patients were diagnosed with obstructive SA. 5 out of those 89 patients required placement of a nasopharyngeal airway in the post-operative period. Removal of the nasopharyngeal airway was completed within 10 minutes of arrival to the recovery area. None of the other complications listed were noted on the 89 patients.

Conclusions: Based on the retrospective review of the noted charts, the extent of complications in the immediate post-operative period in patients with obstructive SA was limited to short-lasting airway manipulations. Further studies are needed to identify post-discharge complications, safer anesthetic techniques, and appropriateness of SAS patients for same-day surgery.

Can we find predictive factors for unplanned overnight admission?


Background and Goal of Study: The major goal for ambulatory surgery programmes is to send back home patients in a safe and well-being way after surgery. Unplanned overnight admissions (UOA) are always a drawback of our clinical practice and all efforts must be made in order to avoid these situations. The goal of this study was to identify risk factors involved on UOA of patients submitted to day surgery.

Materials and Methods: We analysed retrospectively our database that included 5134 patients operated at our Day Surgery Unit (DSU) between January 2001 and December 2004. The following variables: sex, surgical speciality, age, physical status (ASA), preoperative evaluation, anaesthetic technique, time of anaesthesia, postoperative nausea and vomiting (PONV), pain, and haemorrhage were identify in order to find if they were UOA risk factors. First we used Chi-Square Test for testing each factor individually. Differences were considered significant when p < 0.05. Secondly, we used logistic regression for identify the multivariate association strength of these factors.
5. Quality

### Results:

<table>
<thead>
<tr>
<th>Variable</th>
<th>Total</th>
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</tr>
</thead>
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<td>≥180</td>
<td>22</td>
<td>0.4</td>
<td>5 22.7</td>
</tr>
</tbody>
</table>

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

At the multivariate analysis (multiple logistic regression), sex, physical status (ASA), preoperative evaluation and anaesthetic technique were not associated with UOA.

Conclusions: The identification of UOA risk factors such those found in our sample will allow us to select more carefully patient and surgical procedures for an ambulatory programme in order to improve the quality of our clinical care and the satisfaction of our patients.

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

L. Hidalgo. Hospital de Mataró, Spain

**Background:** The quality assessment is essential for the development of Major Ambulatory Surgery Units (MASU). Quality indicators have to be under control to achieve a correct management of the MASU. Material and Methods: Since 1994 to 2004, 24,827 surgical procedures have been performed in the MASU of the Hospital of Mataró, while 49952 surgical procedures have been done as in-patient. Quality indicators changed over time but several were considered since the activity of the MASU began. Those indicators were the following: substitution index, cancellations, early and late admissions, postoperative phone calls and patients with postoperative pain under 3 measured by analgesical visual scale.

**Results:** The substitution index increased from 21.69% in 1994 to 63.98% in 2004. Cancellations varied widely, but in 2004, there was no case. Percentage of early admissions was always under 3% (1.55% in 2004). In the case of late admissions, the rate was always under 0.5% (0.27% in 2004). Postoperative phone calls progressively decreased until 2.86 in 2004. Conclusions: The results of the quality indicators of our MASU have been improving along the time. The knowledge and evaluation of those indicators allows a good quality management.

### Posters

#### Patient safety

M. Grunnen. Sydvestjysk Hospital, Esbjerg, Denmark

01.01.04 a new law in Denmark was founded, as the first country in the world. That means that everybody working within the hospital is obliged to report an unintended event. We want to make a poster, giving you a view on how we got introduced, and are working with patient safety in the Danish hospital.

The poster will contain
- The law
- Definitions and ideas
- Illustrations
- The reporting system
- Examples and courses on unintended events.

#### Investigating patients

P. Thomson. Newcastle Dental Hospital, UK

**Background:** We have previously reported that patients often experience significant pain and discomfort following oral day surgery. We have also demonstrated the usefulness of nurse-led telephone questionnaires following day surgery to monitor patient progress. Little is known, however, about the details of patients' experiences during the days immediately following surgery and there is known to be a need to improve pain control for these patients.

**Methodology:** Adult patients (18–65 yrs) attending the Oral Day Unit for dento-alveolar surgery procedures were recruited to the study. All patients were of ASA I or II fitness and underwent standardised anaesthetic and surgical techniques. A VAS pain score was recorded pre-operatively (baseline) and immediately before discharge (post-operative). A structured telephone questionnaire was completed by the day case nurse looking after the patient at 1 day, 5 days and 8 days post-surgery.

**Results:** Detailed results will be presented summarising general wellbeing, post-operative pain experience, efficacy of analgesic medication, incidence of nausea, headache, sore throat, post-operative tiredness, effects on sleep, return to normal activity and work, and the presence of other post-surgical problems.

**Conclusions:** Patients' experiences following oral day surgery will thus be characterised and the usefulness of post-operative telephone consultations/questionnaires discussed. Suggestions for improved patient care will be outlined.

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

R. Voase. Newcastle Dental Hospital, UK

The Oral Surgery Day Unit at Newcastle Dental Hospital provides surgical and dental treatment under general anaesthesia for a wide range of patients including children, adults and patients with medical or physical disabilities.

Despite careful pre-operative advice, anecdotal evidence suggests that many patients fast in excess of recommended anaesthetic guidelines leading to delayed recovery.

In order to investigate this further, a prospective study of 87 consecutive day case patients attending morning theatre sessions between August to November 2002 was carried out. Details of times patients fasted, length of anaesthesia, recovery periods and post-operative nausea and vomiting were recorded.

Patients ranged from 4 to 72 years of age, and their fasting periods varied from the recommended 4 hrs to greater than 18 hrs. Anaesthetic time was also variable, from 10 mins to over 3 hrs, depending on the type of surgical or dental procedure.
Whilst there was no clear correlation between pre-operative fasting and recovery time, it was very concerning to discover just how long some patients actually fasted prior to surgery. As a consequence of this study, we have revised our ambulatory surgery fasting guidelines and clarified pre-operative patient information.

101 Development of a nurse-led pre-admission clinic
S. Briggs. Newcastle Dental Hospital, UK

Development of a nurse-led pre-admission clinic has greatly improved the admission process in our Unit for oral day case surgery, optimising theatre utilisation, reducing patient anxiety, improving quality of care and enhancing patient satisfaction. Discharge from the Unit, however, tends to be less formalised based primarily upon subjective nurse/clinician assessment.

The aim of this study was to review patients’ experiences upon discharge from our Unit and to develop a formal, patient orientated discharge protocol. 100 consecutive, oral surgery day patients were invited to take part in a nurse-led telephone questionnaire carried out 24 hours following their discharge. 12 questions were asked: 5 examining patients’ general experience following surgery and 7 specific to details of their discharge from the Day Unit.

Results will be presented to summarise patients’ current experience, and suggestions for a structured, formalised discharge protocol will be made which combine both patient and nurse/clinician viewpoints.

102 Satisfaction and quality of day surgery treatment for breast cancer
E. Schlichting. Ulleval University Hospital, Oslo, Norway

Nearly 600 new cases of breast cancer are treated at Ulleval University Hospital each year. From 2000, 90% of all cases are operated at our day surgery unit. Health personnel were initially sceptical because of the risk for reduced physical and psychological follow-up of this patient group. We wanted to investigate the patients’ experience with day surgery and also to focus on topics where we could possibly do better. Patients were given a questionnaire after the operation and delivered it three weeks later on the first postoperative control. Also, patients, relatives and health personnel were interviewed. 60% out of 123 delivered forms were returned. The average age was 57 years (21–82), 72% had breast conserving surgery and 77% were operated with the sentinel node technique in the axils. In general, the results from the questionnaires and interviews were very positive. They were most discontented with the period of waiting for the histological report (could be 3 weeks). Everyone was pleased to go home from the hospital the day of operation or eventually to the patient hotel. Very few patients had problems with pain or nausea the first two postoperative days (37% on DO and 40% on D1). 18% of patients resorted to auto medication and only 4% consulted their GP. NSAIDS being prescribed in only 14% of cases. Opioid rescue therapy was never prescribed. A discharge letter addressed to the General Practitioner (GP) was given to 45% of patients. 58% of patients experienced postoperative pain: 50% at home, especially during the first two postoperative days (37% on D0 and 40% on D1). 18% of patients were familiar with the procedure to be followed. In addition there was no clear existing protocol for reference. This led to a temporary halt in treatment.

Objectives: To restart the treatments with mutual agreement between the gynaecologists and nurses involved. This according to accepted regulations with regard to patient safety and procedural guidelines under the Dutch act, dealing with the healthcare professions (BIG-act).

Method: Participation in devising rules of practice was expected by a select number of specialists and nurses involved. The purpose was to initiate and develop a practical working relationship satisfactory to both parties. Combining education of gynaecologists and nurses resulted in a mutually accepted protocol. During the course a lawyer explained the BIG-act framework. The sedation technique was written by an anesthesiologist in confirmation the Dutch Quality Institute of Healthcare (CBO)-consensus-report on Sedation by Non-anesthesiologists and the Guidelines stipulated by the American Society of Anesthesiologists. Special attention was paid to education, monitoring, preparation and administration of pharmaceuticals and the qualifications of the participants (see the table).
In this way a new basis is founded for the implementation of the treatment. In addition it is surprising for both parties to be educated together in this way.

The education involved a BLS-training for both nurses and gynaecologists and a ALS-training for the gynaecologists only.

Results: A protocol was written according to the given guidelines. Dosages and administration of the diverse pharmaceuticals are accurately documented, as well as the responsibilities assigned to the nurse and gynaecologist.

The participating gynaecologists and nurses attended the BLS and the ALS-training and this group is now participating in the gynaecological treatment under local anaesthesia with sedation. This is now proceeding satisfactorily.

Conclusion: By searching for a common solution with both gynaecologists and nurses when problems and miscommunication arise, it is possible to bridge the differences as long as one operates according to accepted and safe preconditions.

References


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

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Introduction: Telephoning patients the day after outpatient surgery should allow to check that the patient’s condition in the day following surgery is at least as satisfactory as if he or she had been hospitalised overnight.

Methods: Between 2001 and 2003, 6881 patients underwent ambulatory surgery. In principle, all patients are telephoned the following day and questioned using a standardised questionnaire. 31 patients (mean age 48 years, 74% female). Mean (±SD) HRQoL score (on a scale of 0–1) before the operation was 0.924 ± 0.06. Six months after the operation the mean utility score had increased only slightly to 0.93 ± 0.07. Of the 15 dimensions of health covered by the quality of life (HRQoL) data is currently available from 31 patients (mean age 48 years, 74% female). Mean (±SD) HRQoL score (on a scale of 0–1) before the operation was 0.924 ± 0.06. Six months after the operation the mean utility score had increased only slightly to 0.93 ± 0.07. Of the 15 dimensions of health covered by the quality of life instrument, sleeping, discomfort and symptoms, depression, distress, vitality and sexual activity. For each dimension, the respondent must choose one of the five levels that best describes his or her present state of health. From the results a single index score (15D score) on a 0–1 scale, representing the overall HRQoL, can be calculated from the health state descriptive system by using a set of population-based preference or utility weights. An index value of 1 represents full health and 0 is equivalent to being dead. To assess the cost-effectiveness of varicose vein surgery the HRQoL data are combined with routinely collected data on diagnostic and financial (direct costs borne by the provider) indicators of care.

Results: Data is currently available from 31 patients (mean age 48 years, 74% female). Mean (±SD) HRQoL score (on a scale of 0–1) before the operation was 0.924 ± 0.06. Six months after the operation the mean utility score had increased only slightly to 0.93 ± 0.07. Of the 15 dimensions of health covered by the quality of life instrument, sleeping, discomfort and symptoms, depression, distress, vitality and sexual activity. For each dimension, the respondent must choose one of the five levels that best describes his or her present state of health. From the results a single index score (15D score) on a 0–1 scale, representing the overall HRQoL, can be calculated from the health state descriptive system by using a set of population-based preference or utility weights. An index value of 1 represents full health and 0 is equivalent to being dead. To assess the cost-effectiveness of varicose vein surgery the HRQoL data are combined with routinely collected data on diagnostic and financial (direct costs borne by the provider) indicators of care.

Discussion: Collection of simple cost-effectiveness data in the department of day case surgery is feasible, requires only a small amount extra work and is potentially very useful when allocation of limited health care resources is considered. Surgery of varicose veins has a slight positive impact on HRQoL.

Satisfactory rate after laparoscopic day-surgery hysterectomy

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Study objective: To elucidate the safety and patient’s satisfaction with laparoscopic supracervical hysterectomy performed in an outpatient setting.

Design: Prospective case study of fifty-two women who underwent outpatient laparoscopic supracervical hysterectomy and a telephone interview after 3–24 months. Forty-two women included.
Material and Methods: By discharge, the patients received written and oral information with the gynecologist and a nurse. Attention was made to expected pain and recovery, as well as telephone numbers to hospital and gynecologist.

Results: 36 (86%) of the 42 patients experienced no nausea. Pain was not seen in 30 (71%) after 7 days, pain score on VAS 1.24. Of the 42 patients 31 (74%) were satisfied. Return to normal activity was indicated as 25.1 day (2-120). Sexual activity was better in 13 patients. 18 of the 42 patients contacted the health system due to pain and fatigue need of more sick leave. 2 patients were dissatisfied with the help. 36 (86%) of 42 patients would recommend the outpatient hysterectomy procedure.

Conclusion: Laparoscopic supracervical hysterectomy as an outpatient procedure is a safe and highly acceptable treatment. The patients feel safe and taken care of.

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

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Gabapentin is an antiepilepticum recently introduced for the treatment of postoperative pain.

Purpose: To investigate possible late side effect after discharge of preoperative gabapentin as an adjuvant to conventional postoperative pain treatment after laparoscopic sterilisation.

Methods: This study was part of another double-blind randomised placebo controlled study of the effect of gabapentin on postoperative pain [group 1, 38 patients (Gaba), group 2, 38 patients (Control)]. Preoperatively Gaba and Control groups received 1200 mg gabapentin and placebo, respectively. All patients received lornoxicam 8 mg preoperatively and PCA morphine postoperatively. At home patients administered lornoxicam, paracetamol and morphine as needed. 23 patients (Gaba) and 33 patients (Control), respectively, filled out a questionnaire on the evening of the 1. and the 4. postoperative day. Questions concerned pain intensity, subjective symptoms as nausea, vomiting and dizziness and time to mobilization.

Results of the questionnaires:

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

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

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

G. Goksøyr. Ullestad University Hospital, Norway

Introduction: Between 1994 and January 2005; 1294 outpatient laparoscopic cholecystectomy (OLC) have been performed in our out-patient surgery unit. Follow-up routines include a telephone interview on the first postoperative day. Follow-up studies show that steroids reduce postoperative problems as nausea and pain. In April 2003 we started to give the OLC-patients dexamethasone 4 mg perioperatively. We continued giving our standardized total intravenous general anaesthesia with infusion of propofol and remifentanil. Additionally ketorolac, paracetamol and droperidol and ondansetron were administrated as prophylaxis against postoperative pain and nausea. In order to validate the effect of steroids, a retrospective study on the outcome after outpatient laparoscopic cholecystectomy was initiated, focusing on the frequency of nausea, vomiting and pain on the first postoperative day.

Patients and Methods: During a period of eleven months, from December 2001 till November 2002, 100 patients were operated with OLC. None of these patients got steroids (Group 1). From April 2003 till November 2003, 68 patients were operated with OCL. These patients got dexamethasone 4 mg (Group 2). The study compares Group 1 and Group 2. All patients were interviewed by telephone according to a standardized formula on the first postoperative day.

Results: None of the procedures were converted to open operation. Group 1: 93% of the patients were discharged according to plan the same day. In this group 17% had nausea and 7% did vomit. 13% had severe pain, 80% had moderate pain and 7% had no pain. 80% were fully mobilized on the first postoperative day. Group 2: 96% were discharged according to plan the same day. 14% had nausea, but none did vomit. 5% had severe pain, 40% had moderate pain and 55% had no pain. 92% were fully mobilized on the first postoperative day.

Conclusions: Steroids reduce postoperative pain, nausea and vomiting convincingly after outpatient laparoscopic cholecystectomy. Most of the patients are fully mobilized on the first postoperative day.