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Literature search results

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Search details

Day case laparoscopic cholecystectomy in the UK

Resources searched

MEDLINE; EMBASE; NHS Evidence; National Library for Health; TRIP database; Cochrane Database

Laparoscop*; LAPAROSCOPY; Laprascopy; CHOLECYSTECTOMY, LAPAROSCOPIC; cholecystectomy; CHOLECYSTECTOMY; “day case surgery”; AMBULATORY SURGICAL PROCEDURES; (outpatient AND surgery); (“out patient” OR out-patient OR outpatient); (surgery OR "surgical procedure"); GENERAL SURGERY; OUTPATIENTS

Summary

Included are some guidelines and evidence-based reviews you may find useful. As your search contained no particular outcome, I can’t summarise the evidence for you. You did mention that you were interested in UK trials. Unfortunately it is not possible to filter only UK trials, as UK only may refer to the trial or to UK published journals; indeed a UK trial may have been published in a non-UK journal. I have however removed the trials which are obviously non-UK, but often abstracts do not reveal where trials take place. I have included five-years of research and only the research referencing operative procedures. If you also want research on the efficacy of day-case over inpatient surgery, please let me know.

Guidelines

British Association of Day Surgery
Day case laparoscopic cholecystectomy 2004
Integrated care pathways for day surgery patients 2004
Spinal anaesthesia in day surgery : a practical guide 2004
Day surgery and the diabetic patient : guidelines for the assessment and management of diabetes in day surgery patients 2004

Association of Anaesthetists of Great Britain and Ireland
Day surgery 2 2005

NICE
IPG287 Laparoscopic cystectomy: guidance 2009
CG65 Perioperative hypothermia (inadvertent): full guideline 2008

Royal Infirmary Edinburgh
ICP for Laparoscopic Cholecystectomy

Evidence based reviews

Cochrane Library Database of Systematic Reviews
Low pressure versus standard pressure pneumoperitoneum in laparoscopic cholecystectomy 2009
Day-case versus overnight stay for laparoscopic cholecystectomy 2008
Routine abdominal drainage for uncomplicated laparoscopic cholecystectomy 2007

Published research

1. The effect of melatonin on sleep quality after laparoscopic cholecystectomy: a randomized, placebo-controlled trial

Author(s): Gogenur I, Kucukakin B, Bisgaard T, Kristiansen V, Hjortso NC, Skene DJ, Rosenberg J

Citation: Anesthesia & Analgesia, April 2009, vol./is. 108/4(1152-6), 1526-7598

Publication Date: April 2009

Abstract: BACKGROUND: In this study, we investigated whether melatonin administration could improve postoperative subjective sleep quality and reduce discomfort. METHODS: One hundred twenty-one patients scheduled for elective ambulatory laparoscopic cholecystectomy were randomized to oral 5 mg melatonin (n = 60) or placebo (n = 61) for 3 nights after surgery. Subjective sleep quality, sleep duration, sleep timing, and subjective discomfort (fatigue, general well-being, and pain) were measured. RESULTS: Sleep latency was significantly reduced in the melatonin group (mean [sd] 14 min [18]) compared with placebo (28 min [41]) on the first postoperative night (P = 0.015). The rest of the measured outcome variables did not differ between groups. CONCLUSIONS: Melatonin did not improve subjective sleep quality or discomfort compared with placebo after laparoscopic cholecystectomy.

Source: MEDLINE

Full Text:
2. A randomized, double-blind, controlled trial of perioperative administration of gabapentin, meloxicam and their combination for spontaneous and movement-evoked pain after ambulatory laparoscopic cholecystectomy.

Author(s): Gilron I, Orr E, Tu D, Mercer CD, Bond D

Citation: Anesthesia & Analgesia, February 2009, vol./is. 108/2(623-30), 1526-7598

Abstract: BACKGROUND: Hysterectomy and spinal surgery inpatient trials suggest favorable interactions between cyclooxgenase-2 inhibitors and gabapentin/pregabalin on postoperative days 1-2. We present the first trial of meloxicam-gabapentin combination after outpatient laparoscopic cholecystectomy. METHODS: This was a randomized, double-blind trial comparing daily oral administration of 1) meloxicam 15 mg, 2) gabapentin 1200-1600 mg, and 3) a combination of the two starting 1 h before until 2 days after surgery. Primary outcomes included day of surgery spontaneous and movement-evoked pain. Secondary outcomes included pain on Days 1, 2, and 30, adverse effects, opioid consumption, spirometry, pain-related interference, hospital discharge time, return to work time, and patient satisfaction. RESULTS: On the day of surgery, 60-min rest pain (0-10 numerical rating scale +/- sd) was significantly lower (P < 0.05) with gabapentin alone (2.0 +/- 1.6) versus meloxicam alone (3.6 +/- 2.1). Observed pain differences between the combination (2.9 +/- 2.1) and gabapentin alone were fairly small in favor of gabapentin alone (P > 0.05). Secondary analyses indicated that nausea was significantly less frequent with the combination (24%) versus the single-drug meloxicam (57%) only. CONCLUSION: Although nausea was reduced with combination therapy, this trial provides little or no support for the combined use of meloxicam and gabapentin for pain relief on the day of surgery. This suggests that perioperative analgesic polypharmacy may not always be necessary or appropriate.

Source: MEDLINE

Full Text:

Available in fulltext at Ovid

Available in fulltext at Ovid

3. Daycase laparoscopic cholecystectomy: a prospective study of post-discharge pain, analgesic and antiemetic requirements.

Author(s): Kavanagh T, Hu P, Minogue S

Citation: Irish Journal of Medical Science, June 2008, vol./is. 177/2(111-5), 0021-1265

Publication Date: June 2008

Abstract: BACKGROUND: Laparoscopic cholecystectomy has been performed as a day-case procedure for over a decade. This procedure can be associated with a high incidence of pain and post-operative nausea and vomiting (PONV). There is a paucity of information regarding the post-discharge care of these patients. AIMS: To determine the effectiveness and adequacy of take-home analgesic packs given to patients undergoing ambulatory surgery. METHODS: A prospective study of 40 patients undergoing laparoscopic cholecystectomy to evaluate post-operative pain, analgesia requirements and PONV following discharge. Data regarding unplanned admissions, patient satisfaction and GP attendance rates were also recorded. RESULTS: At 24 h, 65% of patients reported
moderate pain, 23% severe pain and 25% of patients reported PONV. The rate of GP attendance for further analgesia or antiemetics was 12.5%. Unexpected admission rate was 10%. CONCLUSION: The incidence of PONV post-discharge suggests that adding an antiemetic to our take-home analgesic packs may improve patient comfort. The 2-day supply of diclofenac and co-codamol could also be extended as 65% of patients had moderate to severe pain. The information gathered shows the importance of post-discharge follow-up of ambulatory surgery patients.

Source: MEDLINE

4. Effect of paracetamol and coxib with or without dexamethasone after laparoscopic cholecystectomy.

Author(s): Tiippana E, Bachmann M, Kalso E, Pere P

Citation: Acta Anaesthesiologica Scandinavica, May 2008, vol./is. 52/5(673-80), 1399-6576

Publication Date: May 2008

Abstract: BACKGROUND: Pain after laparoscopic cholecystectomy (LCC) is multifactorial. Effective post-operative pain control is necessary in LCC performed as day-case surgery. We studied the efficacy of paracetamol or valdecoxib with or without dexamethasone after LCC. METHODS: One hundred sixty patients were randomized to four groups of 40 patients. Groups 1 and 3 received parecoxib 40 mg intravenously (IV) during surgery and valdecoxib 40 mg x 1 per os (PO) for 7 post-operative days. Groups 2 and 4 received paracetamol 1 g x 4 IV during surgery and 1 g x 4 PO for 7 days. In addition, Groups 3 and 4 were given dexamethasone 10 mg IV intra-operatively. Propofol and remifentanil were used during surgery. The patients were given oxycodone 0.05 mg/kg IV in phase 1 post-anaesthesia care unit (PACU 1) or 0.15 mg/kg PO in phase 2 post-anaesthesia care unit (PACU 2) as needed to keep visual analogue scale <3/10. The patients were supplied with the study drugs for 7 post-operative days. RESULTS: Pain intensity, nausea and the need of oxycodone in phase 1 PACU were similar in all groups. Dexamethasone reduced the need of oral oxycodone in phase 2 PACU (7.0 +/- 1.0 mg vs. 9.1 +/- 1.0 mg, P<0.05). Pain intensity was similar in all groups at home. More patients in the parecoxib/valdecoxib groups needed rescue medication on the 1st post-operative day (P<0.001) than paracetamol-treated patients. CONCLUSION: Paracetamol was as effective as parecoxib/valdecoxib for pain after LCC. Dexamethasone decreased the need of oxycodone in phase 2 PACU. The effect of dexamethasone was similar in paracetamol and parecoxib/valdecoxib patients.

Source: MEDLINE

Full Text: Available in print at Lincoln County Hospital Professional Library

5. Meta-analysis of randomized controlled trials on the safety and effectiveness of day-case laparoscopic cholecystectomy.

Author(s): Gurusamy K, Junnarkar S, Farouk M, Davidson BR

Citation: British Journal of Surgery, February 2008, vol./is. 95/2(161-8), 1365-2168

Publication Date: February 2008

Abstract: BACKGROUND: Although day-case laparoscopic cholecystectomy can save bed costs, its safety has to be established. The aim of this meta-analysis is to assess the advantages and disadvantages of day-case surgery compared with overnight stay in patients undergoing elective laparoscopic cholecystectomy. METHODS: Randomized
clinical trials addressing the above issue were identified from The Cochrane Library trials register, Medline, Embase, Science Citation Index Expanded and reference lists. Data were extracted from these trials by two independent reviewers. For each outcome the relative risk, weighted mean difference or standardized mean difference was calculated with 95 per cent confidence intervals based on available case analysis. RESULTS: Five trials with 215 patients randomized to the day-case group and 214 to the overnight-stay group were included in the review. Four of the five trials were of low risk of bias. The trials recruited 49.1 per cent of patients presenting for cholecystectomy. There was no significant difference between day case and overnight stay with respect to morbidity, prolongation of hospital stay, readmission rates, pain, quality of life, patient satisfaction, and return to normal activity and work. In the day-case group 80.5 per cent of patients were discharged on the day of surgery. CONCLUSION: Day-case laparoscopic cholecystectomy is a safe and effective treatment for symptomatic gallstones. 2008 British Journal of Surgery Society Ltd. Published by John Wiley & Sons, Ltd.

Source: MEDLINE

Full Text:
Available in fulltext at Ovid

6. Day-surgery laparoscopic cholecystectomy: factors influencing same-day discharge.

Author(s): Psaila J, Agrawal S, Fountain U, Whitfield T, Murgatroyd B, Dunsire MF, Gonzalez JG, Patel AG

Citation: World Journal of Surgery, January 2008, vol./is. 32/1(76-81), 0364-2313

Publication Date: January 2008

Abstract: BACKGROUND: Day-surgery laparoscopic cholecystectomy (LC) should be the procedure of choice in patients with symptomatic gallstone disease. This article assesses feasibility, patient outcome and predictive factors for successful day-case laparoscopic cholecystectomy. METHOD: A retrospective analysis of our prospective database of 176 patients following laparoscopic cholecystectomy in a day-surgery unit was performed. A telephone interview was conducted within 24 h after discharge and again after 3 weeks. RESULTS: Of the 176 cases included in this study, 74% had biliary colic, cholecystitis (16%), pancreatitis (8%), and jaundice (2%). In addition to LC, nine patients (5.1%) underwent laparoscopic bile duct exploration and ten (5.7%) had an additional procedure performed. Eighty-six percent of the patients were discharged the same day. Multivariate analysis identified risk factors affecting same-day discharge, including age greater than 50 years and intraoperative complications. Bile duct exploration reduced the odds of discharge but did not reach significance. Postoperative telephone interviews identified high patient satisfaction with 86% of respondents recommending LC as a day-surgery procedure. CONCLUSION: Day-surgery LC is a safe procedure with an acceptable rate of patient discharge. However, intraoperative complications or age over 50 years adversely affected the same-day discharge rate and as such should be taken into consideration when planning day-case laparoscopic cholecystectomy.

Source: MEDLINE

7. Pre-incision local infiltration with levobupivacaine reduces pain and analgesic consumption after laparoscopic cholecystectomy: a new device for day-case procedure.

Author(s): Cantore F, Boni L, Di Giuseppe M, Giavarini L, Rovera F, Dionigi G
**Abstract:** All over the World laparoscopic cholecystectomy is the treatment of choice for symptomatic cholelithiasis; use of local long lasting anesthetics reduces post-operative pain. Levobupivacaine is one of the most effective local anesthetics. The aim of our study is to test the effectiveness of local anesthetics comparing pre- versus post-operative trocar site's infiltration. 50 patients were enrolled in our study and 25 five patients were randomized into pre-I group (pre-incisional infiltration) and 25 into post-I group (post-operative infiltration); all the operations were performed with the same technique (Anglo-Saxon with 4 accesses) by 4 expert laparoscopic surgeons; our results showed different analgesic consumption between the 2 groups of patients; in the pre-I group the mean intravenous dose of Ketorolac post-operative used was 124 mg while in the post-I group was 339 mg: this difference was statistically significant.; the mean VAS was 10.7 in the post-I group while in the pre-I group was 5.1, also the i-VAS score's difference was statistically significant: in fact in the post-I group i-VAS was 8.8 while in the post-I group 14.8. Our study demonstrated that infiltration of the trocar site with long lasting local anesthetic is extremely effective for the treatment of post-operative pain after laparoscopic cholecystectomy; pre-incisional local infiltration seems to be better in term of pain perception and intravenous post-operative analgesic consumption.

**Source:** MEDLINE

8. **Anatomical footprint for safe laparoscopic cholecystectomy without using any energy source: a modified technique.**

**Author(s):** Agarwal B, Gupta M, Agarwal S, Mahajan K

**Citation:** Surgical Endoscopy, December 2007, vol./is. 21/12(2154-8), 1432-2218

**Publication Date:** December 2007

**Abstract:** BACKGROUND: Over the last two decades, laparoscopic cholecystectomy has become the gold standard for treating cholecystolithiasis and an index operation for evaluation and assessment of laparoscopic surgical skills. Its wider application and continuous refinement have not been accompanied by a commensurate decrease in morbidity due to biliary, vascular, or visceral injuries. Use of an energy source, especially monopolar electrosurgery, has been identified as a culprit for many of these injuries. This study assessed the feasibility of performing laparoscopic cholecystectomy safely without using any energy source by taking advantage of the avascular anatomical planes.

**METHOD:** Patients attending the surgery clinic of our center who were candidates for a laparoscopic cholecystectomy were enrolled. Informed consent was obtained from each patient before the procedure. The study was approved by the Ethical Review Board of the hospital and was conducted as per GCP guidelines. **RESULTS:** Between June 2005 and July 2006, 83 patients were enrolled. All patients underwent laparoscopic cholecystectomy without any energy source being used. There was no incidence of biliary, vascular, or visceral injury. All patients remained hemodynamically stable. There was no conversion or mortality. The hospital stay was 8-16 h. Patients were followed up by telephone for the first 48 hours and then by regular outpatient visits until they were well. CONCLUSION: A safe laparoscopic cholecystectomy without using any energy source can be performed by following the proper anatomical footprint.

**Source:** MEDLINE

9. **Intraoperative esmolol infusion in the absence of opioids spares postoperative fentanyl in patients undergoing ambulatory laparoscopic cholecystectomy.**
**Author(s):** Collard V, Mistraletti G, Taqi A, Asenjo JF, Feldman LS, Fried GM, Carli F

**Citation:** Anesthesia & Analgesia, November 2007, vol./is. 105/5(1255-62, table of contents), 1526-7598

**Publication Date:** November 2007

**Abstract:** BACKGROUND: The use of opioids during ambulatory surgery can delay hospital discharge or cause unexpected hospital admission. Preliminary studies using an intraoperative continuous infusion of esmolol in place of an opioid have inconsistently reported a postoperative opioid-sparing effect. In this study, we compared esmolol versus either intermittent fentanyl or continuous remifentanil on postoperative opioid-sparing, side effects, and time of discharge. METHODS: Ninety patients (consisting of three groups) were enrolled in this prospective, randomized, and observer-blinded study. The control group (n = 30) received intermittent doses of fentanyl, the esmolol group (n = 30) received a continuous infusion of esmolol (5-15 microg x kg(-1) x min(-1)) and no supplemental opioids during surgery, and the remifentanil group (n = 30) received a continuous infusion of remifentanil (0.1-0.5 microg x kg(-1) x min(-1)). General anesthesia was standardized, and adjuvant medications included acetaminophen, ketorolac, local anesthetics in the skin incisions, dexamethasone, and droperidol. Postoperative analgesia included fentanyl. RESULTS: The amount of fentanyl in the postanesthesia care unit was significantly less in the esmolol group, 91.5 +/- 42.7 microg, compared with the other two groups, remifentanil, 237.8 +/- 54.7 microg, control, 168.1 +/- 96.8 microg (P < 0.0001). The incidence of nausea was more frequent in the control (66.7%) and remifentanil (67.9%) groups compared with the esmolol group (30%) (P < 0.01). The esmolol group reached the White-Song score of 12 of 14 faster than the remifentanil group (P < 0.01), and left the hospital 45-60 min earlier (P < 0.004). CONCLUSIONS: Intraoperative IV infusion of esmolol contributes to a significant decrease in postoperative administration of fentanyl and ondansetron and facilitates earlier discharge.

**Source:** MEDLINE

**Full Text:**

Available in fulltext at [Highwire Press](#)

Available in fulltext at [Ovid](#)

Available in fulltext at [Ovid](#)

10. Nursing intervention for day-case laparoscopic cholecystectomy.

**Author(s):** Mitchell M

**Citation:** Nursing Standard, October 2007, vol./is. 22/6(35-41), 0029-6570

**Publication Date:** October 2007

**Abstract:** A considerable amount of elective surgery can now be undertaken on a day-case or short-stay basis--23-hour or 72-hour stay. Such changes to modern surgery are transforming surgical nursing as a result of the reduced levels of physical care traditionally required by elective surgical patients. Brief hospital stay and self-care have become the greater part of preparation for, and recovery from, elective surgery. Education and psychological aspects of care are also important in the development of elective surgical nursing. This article focuses on laparoscopic cholecystectomy performed as a day-case procedure and identifies the changing aspects of nursing intervention required.

**Source:** MEDLINE

**Full Text:**
11. Day case laparoscopic cholecystectomy is safe and feasible: a case controlled study.

Author(s): Rathore MA, Andrabi SI, Mansha M, Brown MG

Citation: International Journal Of Surgery, August 2007, vol./is. 5/4(255-9), 1743-9159

Publication Date: August 2007

Abstract: BACKGROUND: Day case laparoscopic cholecystectomy (DC-LC) is being practised in the USA and at sporadic centres in the UK including our department. The aim was to evaluate the admission rate after DC-LC. PATIENTS AND METHODS: Prospectively collected data was analysed retrospectively. The case notes of all patients were retrieved from the medical records and reviewed individually. Inclusion criteria for DC-LC were cholelithiasis, non-acute cholecystitis, ASA I-III and informed consent. Standard laparoscopic cholecystectomy was performed. All patients had anti-DVT prophylaxis (pneumatic compression and enoxaparin), per-operative antibiotic, oro-gastric tube, paracetamol suppository and local anaesthetic to all wounds. They were discharged the same day. The end point was 6-week follow-up (86% overall). RESULTS: Over a 32-month period, 164 consecutive patients with symptomatic cholelithiasis and ASA score of III or less were included. M:F was 1:5 and median age 45y. There were two conversions. The direct admission rate (DAR) was 26/164 (14%). The indication for direct admission included observation alone (7/26), wound pain (6/26), nausea (3/26), suction drain (2/26) and operation in the afternoon (2/26). Six (3.6%) required re-admission. One had a cystic artery pseudo-aneurysm presenting with colonic bleeding and another with an injury to CBD. One had post-operative mild pancreatitis and three had wound pain and bruising. Fourteen out of 41 were admitted in the >55y age group compared to 12/123 from <55y age group (p=0.00054). CONCLUSION: DC-LC is safe and feasible in non-acute patients with symptomatic cholelithiasis. Over-55y age group had a higher chance of admission, mainly due to caution.

Source: MEDLINE

12. Is there a safe advantage in performing outpatient laparoscopic cholecystectomy in children?.

Author(s): Mendez K, Sabater R, Chinea E, Lugo-Vicente H

Citation: Journal of Pediatric Surgery, August 2007, vol./is. 42/8(1333-6), 1531-5037

Publication Date: August 2007

Abstract: BACKGROUND: Laparoscopic cholecystectomy, the standard procedure for removing the sick gallbladder of children, is generally performed leaving the child overnight in the hospital. PURPOSE: This study aimed to determine if there is a safe advantage in performing laparoscopic cholecystectomy as an outpatient procedure while setting the
clinical parameters for those who will benefit from in-hospital stay. METHODS: Thirty-five patients were selected for the study and were divided into group A, if the outpatient procedure was done, and group B, if the child was left overnight in the hospital. Retrospective review of medical charts was performed. Statistical significance was defined as P < .05. RESULTS: Group A consisted of 13 patients and group B of 22 patients. All patients in group A left the hospital the same day of surgery. Distribution by age and sex in the groups was not statistically different. Preoperative symptoms of vomiting were statistically significantly higher in group B. Presence of an associated medical condition was higher in the in-hospital patients. Concomitant procedures, blood loss estimates, and duration of surgery showed no statistical difference. No child was readmitted after release from the hospital. Pre-, intra-, and postoperative pain management were the same in all patients. Mean postoperative stay and medical charges were statistically significant between the groups. CONCLUSIONS: Laparoscopic cholecystectomy can safely be done as an outpatient procedure. Children with a complicated gallbladder disease process or associated medical condition benefit from an overnight stay. Perioperative pain management is crucial in all cases. Reduced hospital stay and medical charges are significant advantages in performing laparoscopic cholecystectomy as an outpatient procedure.

Source: MEDLINE


Author(s): Sinha S, Munikrishnan V, Montgomery J, Mitchell SJ

Citation: Annals of the Royal College of Surgeons of England, May 2007, vol./is. 89/4(374-8), 1478-7083

Publication Date: May 2007

Abstract: INTRODUCTION: Laparoscopic cholecystectomy has revolutionised the management of symptomatic gallstones and is increasingly performed as a day-case procedure. The aim of this study was to assess the impact of opioid patient-controlled analgesia (PCA) on elective laparoscopic cholecystectomy. PATIENTS AND METHODS: In a prospective, non-randomised, observational study, 76 consecutive patients who underwent elective in-patient laparoscopic cholecystectomy were reviewed. Six patients with complicated gall stone disease and four patients who converted from laparoscopic to an open operation were excluded. RESULTS: Of the 66 remaining in the study group, 25 patients received morphine-PCA and, of these, 9 were fit for discharge. In contrast, 41 patients did not receive PCA and, of these, 27 were fit for discharge (P < 0.05). Median Aldrete score in the PCA group was 16 and in the non-PCA group 18 (P < 0.05). Postoperative nausea and vomiting were more common in patients receiving a morphine-based PCA and with in those with higher anti-emetic requirement (10/25 in PCA and 7/41 non-PCA groups; P < 0.05). CONCLUSIONS: Routine postoperative opioid PCA prolongs the recovery and in-patient stay following elective laparoscopic cholecystectomy. Its role in postoperative pain management in routine laparoscopic cholecystectomy should be questioned.

Source: MEDLINE

Full Text:

Available in fulltext at National Library of Medicine

Available in print at Lincoln County Hospital Professional Library

14. Laparoscopic cholecystectomy under segmental thoracic spinal anaesthesia: a feasibility study

Author(s): van Zundert AA, Stultiens G, Jakimowicz JJ, Peek D, van der Ham WG,
Background: Laparoscopic surgery is normally performed under general anaesthesia, but regional techniques have been found beneficial, usually in the management of patients with major medical problems. Encouraged by such experience, we performed a feasibility study of segmental spinal anaesthesia in healthy patients.

Methods: Twenty ASA I or II patients undergoing elective laparoscopic cholecystectomy received a segmental (T10 injection) spinal anaesthetic using 1 ml of bupivacaine 5 mg ml-1 mixed with 0.5 ml of sufentanil 5 microg ml-1. Other drugs were only given (systemically) to manage patient anxiety, pain, nausea, hypotension, or pruritus during or after surgery. The patients were reviewed 3 days postoperatively by telephone.

Results: The spinal anaesthetic was performed easily in all patients, although one complained of paraesthesia which responded to slight needle withdrawal. The block was effective for surgery in all 20 patients, six experiencing some discomfort which was readily treated with small doses of fentanyl, but none requiring conversion to general anaesthesia. Two patients required midazolam for anxiety and two ephedrine for hypotension. Recovery was uneventful and without sequelae, only three patients (all for surgical reasons) not being discharged home on the day of operation.

Conclusions: This preliminary study has shown that segmental spinal anaesthesia can be used successfully and effectively for laparoscopic surgery in healthy patients. However, the use of an anaesthetic technique involving needle insertion into the vertebral canal above the level of termination of the spinal cord requires great caution and should be restricted in application until much larger numbers of patients have been studied.

Source: MEDLINE

Full Text:
Available in fulltext at Highwire Press
Available in print at Lincoln County Hospital Professional Library

15. Ruptured spleen following laparoscopic cholecystectomy.

Author(s): Leff D, Nortley M, Melly L, Bhutiani RP

Citation: Journal of the Society of Laparoendoscopic Surgeons, January 2007, vol./is. 11/1(157-60), 1086-8089

Publication Date: January 2007

Abstract: Background: Laparoscopic cholecystectomy is generally a safe and well-accepted procedure. However, in a small percentage of patients, it is associated with complications, such as bleeding and injury to the bile duct and other viscerum. Splenic injury as a result of laparoscopic surgery has been reported only in the context of direct trauma, for example due to retraction in hand-assisted urologic surgery. To date, there have been no reported cases of patients requiring splenectomy following laparoscopic cholecystectomy. We report an unusual case of ruptured spleen presenting less than 28 days following "uncomplicated" laparoscopic cholecystectomy. RESULTS: A 52-year-old female presented to our Accident and Emergency department 3 weeks following "uncomplicated" laparoscopic cholecystectomy, complaining of severe left upper quadrant pain radiating to the left shoulder tip. Clinical examination revealed a patient in hypovolemic shock, with localized left upper quadrant peritonism. Abdominal computed tomography supported a diagnosis of splenic rupture, and the patient required an emergency splenectomy. DISCUSSION: Splenic injury rarely complicates laparoscopic cholecystectomy. We postulate that either congenital or posttraumatic adhesions of the parietal peritoneum to the spleen may have caused the capsule to tear away from the
spleen when the pneumoperitoneum was established, resulting in subcapsular hematoma and subsequent rupture in this patient. Videoscopic assessment of the spleen at the end of laparoscopic cholecystectomy might be a worthwhile exercise to aid early recognition and management in such cases.

Source: MEDLINE

16. Prospective randomized trial on low-pressure versus standard-pressure pneumoperitoneum in outpatient laparoscopic cholecystectomy.

Author(s): Chok KS, Yuen WK, Lau H, Fan ST

Citation: Surgical Laparoscopy, Endoscopy & Percutaneous Techniques, December 2006, vol./is. 16/6(383-6), 1530-4515

Publication Date: December 2006

Abstract: Inpatient low-pressure pneumoperitoneum laparoscopic cholecystectomy (LPLC) has been shown to have less postoperative pain (especially shoulder-tip pain). No report so far has documented the use of lower-pressure pneumoperitoneum in outpatient laparoscopic cholecystectomy (LC). A prospective randomized trial was conducted in Tung Wah Hospital, Day Surgery Centre from January 2004 to December 2004. A total of 40 patients were recruited and 20 of whom were allocated to each arm. Outcome measures included operation time, treatment-related morbidity, mortality, postoperative pain (eg, shoulder-tip pain), consumption of analgesics, and level of satisfaction. All patients in both groups could be discharged on the same day. Patients' demographics and operation time were comparable in both groups. There were no treatment-related morbidity and mortality, nor was there any significant difference in postoperative pain. Less shoulder-tip pain was observed in the LPLC group though without significant difference (5% vs. 20%; P=0.151). Three patients in the LPLC group needed higher insufflation pressure (12 mm Hg) because of inadequate exposure and adhesions, and the operations were successful in all of them. Otherwise, no conversion to open procedure was noted in both groups. The consumption of analgesics was minimal and a high level of satisfaction was achieved in both groups of patients. The present study demonstrated no difference in LPLC and standard-pressure pneumoperitoneum laparoscopic cholecystectomy in the outcomes of outpatient LC. Routine use of lower-pressure pneumoperitoneum in outpatient LC would not be recommended unless in selected straightforward cases.

Source: MEDLINE

17. Ambulatory laparoscopic cholecystectomy outcomes.

Author(s): Sherigar JM, Irwin GW, Rathore MA, Khan A, Pillow K, Brown MG

Citation: Journal of the Society of Laparoendoscopic Surgeons, October 2006, vol./is. 10/4(473-8), 1086-8089

Publication Date: October 2006

Abstract: BACKGROUND: Outpatient laparoscopic cholecystectomy is an established practice in the United States, but it is not well established in the United Kingdom, and evidence of experience is scarce. The aim of this study was to evaluate the effect of ambulatory laparoscopic cholecystectomy on postoperative morbidity and possible cost savings. We tried to elucidate possible predictors of unplanned admission and readmission rates after discharge. METHODS: This study was conducted in 2 phases. The first phase involved 112 patients and was a retrospective analysis from January 2002 to July 2003 (19 months). The second was a prospective study involving 86 patients from August 2003 to April 2005 (21 months). Consultants, associate specialists, or higher surgical trainees performed the surgeries in a dedicated outpatient procedure unit. The study ended 6 weeks after the operation. RESULTS: Hospital mortality was zero. Overall, 29 (15%) patients
required unplanned admissions. Three (1.5%) patients required conversion to open cholecystectomy. Other causes included simple observations (7), wound pain (6), nausea and vomiting (6), suction drain (2), urinary retention (2), operation in the afternoon (2), and shoulder pain (1). Of the patients discharged, 7 (3.5%) required readmission after the initial discharge. Five of the 7 readmissions were wound related and treated conservatively. Two patients underwent laparotomy. CONCLUSION: Ambulatory laparoscopic cholecystectomy appears to be safe, feasible, and cost-effective with a low conversion rate. The unplanned admission rate can be reduced by better training, criteria for discharge, and improvement in anesthesia. This will have implications for surgical training and healthcare resources.

Source: MEDLINE

18. Lack of analgesic effect of parecoxib following laparoscopic cholecystectomy.

Author(s): Puolakka PA, Puura AI, Pirhonen RA, Ranta AU, Autio V, Lindgren L, Rorarius MG

Citation: Acta Anaesthesiologica Scandinavica, September 2006, vol./is. 50/8(1027-32), 0001-5172

Publication Date: September 2006

Abstract: BACKGROUND: The cyclo-oxygenase-2 inhibitor, parecoxib, can be administered parenterally. The recommended dose for post-operative use is 40 mg twice daily, which may not be the appropriate dose for the treatment of visceral pain. We studied the effect of a single dose of parecoxib of either 40 or 80 mg in laparoscopic cholecystectomy, and its effect on opioid-induced side-effects. METHODS: Seventy-three patients scheduled for elective laparoscopic cholecystectomy were enrolled in this prospective, randomized, double-blind study. Patients were randomized into three groups: a placebo-treated control group, a 40-mg parecoxib-treated group (P40) and an 80-mg parecoxib-treated group (P80). We recorded the cumulative fentanyl consumption during the first 20 h post-operatively by patient-controlled analgesia equipment, the pain scores during rest, coughing and mobilization (visual analogue scale, 0-10), the worst pain during the first 2 h post-operatively and in the following 18 h, and the side-effects by questionnaire. RESULTS: No significant differences in fentanyl consumption between the three groups could be detected. The worst pain experienced between 2 and 20 h post-operatively on the ward was significantly lower in the P80 group than in the control group. CONCLUSION: The recommended dose of parecoxib, 40 mg, is not effective for the treatment of pain during the early post-operative period after laparoscopic cholecystectomy. Doubling the dose to 80 mg seems to improve the results.

Source: MEDLINE

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19. Is laparoscopic cholecystectomy safe and acceptable as a day case procedure?

Author(s): Kasem A, Paix A, Grandy-Smith S, El-Hasani S

Citation: Journal of Laparoendoscopic & Advanced Surgical Techniques. Part A, August 2006, vol./is. 16/4(365-8), 1092-6429

Publication Date: August 2006

Abstract: BACKGROUND: This study reviewed the results of performing day case laparoscopic cholecystectomy to assess the feasibility and safety of the procedure as a day
MATERIALS AND METHODS: This is a prospective study of 150 day case laparoscopic cholecystectomies performed between September 1999 and December 2004 under the care of the senior author. The results of a follow-up questionnaire to assess post-discharge clinical course and patient satisfaction were analyzed. All patients had commenced eating and drinking and were fully mobile before discharge home. The length of hospital stay was 4-8 hours. RESULTS: The mean age of the patients was 43 years; 134 patients had an American Society of Anesthesiologists grade I, the remaining 16 patients were grade II. The mean operative time was 41 minutes. There were no conversions to open procedures. There was no bleeding, no visceral injury, and no mortality. There was one admission directly from the day surgical unit (admission rate of 0.6%), but no readmission following discharge. No patients were admitted due to postoperative nausea or pain. Ninety-nine (66%) of 150 patients responded to our questionnaire; 97% were satisfied about the information they had received. Patients rated their satisfaction with the procedure as follows: 75% excellent, 21% good, 3% satisfied, and 1 patient un-satisfied. Ninety-four percent of the patients would recommend the procedure as a day case. CONCLUSION: Day case laparoscopic cholecystectomy is safe, feasible, and cost-effective when patients are carefully selected. It provides good patient satisfaction.

Source: MEDLINE

Full Text:

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Author(s): Prasad A, Foley RJ

Citation: European Journal of Surgery, January 1996, vol./is. 162/1(43-6), 1102-4151

Abstract: OBJECTIVE. To evaluate the safety and cost effectiveness of laparoscopic cholecystectomy as a day case procedure. SETTING. District hospital, England. SUBJECTS. 103 patients undergoing laparoscopic cholecystectomy. INTERVENTIONS. Laparoscopic cholecystectomy by a standard four cannula technique. Propofol anaesthesia, prophylactic antiemetics and pre-emptive analgesia were given in all cases. MAIN OUTCOME MEASURES. Morbidity and cost. RESULTS. 103 patients have undergone laparoscopic cholecystectomy, 51 of them as day cases. Patients were selected for day treatment if they were under 60 years old, they wanted to go home the same day, they had no history of jaundice or any anaesthetic contraindication, and if there was an adult at home to look after them. Three of those selected as day cases required overnight admission, one because of severe pain and two who required a drain overnight. The median hospital stay was 12 hours (range 10-28 hours) and the cost of the operation was about pounds 419. CONCLUSION. This is a safe and cost-effective procedure and should be considered in selected patients.

Source: MEDLINE

Current Controlled Trials

Post-Laparoscopic Cholecystectomy Pain: Benefit of Intraperitoneal Saline 2005