ULTRASOUND-GUIDED TECHNIQUES THOMAS C. WINTER pdf

1: IAME - Winter, Thomas

We are specialists collaborating to provide the best possible care, discover better treatments, and train tomorrow's health care experts.

Postoperative pain is a common complaint following living kidney donation or tumor resection using the laparoscopic hand-assisted technique. To evaluate the potential analgesic benefit of transversus abdominis plane blocks, we conducted a randomized, double-blind, placebo-controlled study in 21 patients scheduled to undergo elective living-donor nephrectomy or single-sided nephrectomy for tumor. Patients were randomized to receive either 20 mL of 0. We found that transversus abdominis plane blocks reduced overall pain scores at 24 hours, with a trend toward decreased total morphine consumption. Nausea, vomiting, sedation, and time to discharge were not significantly different between the two study groups. In the postoperative period, these patients are often treated with patient-controlled opioids, epidural analgesia, or both. While effective, both of these treatment modalities carry risk, ie, opioids have a side effect profile including pruritus, nausea, and vomiting, and increase the risk of oversedation and apnea in patients at risk eg, those with sleep apnea. Epidurals have been associated with hypotension, post dural puncture headaches, changes in management of anticoagulation, as well as rare but serious infections, bleeding, and nerve injury. Transversus abdominis plane TAP blocks have been described as a way of providing analgesia to the anterior abdominal wall with minimal risk. Use of ultrasound to correctly identify structures during administration of these blocks should theoretically further lessen the risk of complications. To date, only a handful of prospective randomized studies have been performed examining the clinical utility of TAP blocks related to kidney transplant. The first three studies 2 â€” 4 showed improved pain scores in patients receiving the TAP block, while Frier et al 5 showed no benefit. Our hypothesis was that TAP block would result in a significant reduction in both opioid consumption primary endpoint and pain scores secondary endpoint in the hour period following surgery. Materials and methods The study was approved by the Mayo Clinic institutional review board and registered at ClinicalTrials. Written, informed consent was obtained from 21 patients aged 23â€”79 years. Initially, we had planned to enroll 50 patients over 2 years, but recruitment proved slower than anticipated, compounded by a surgeon taking a leave of absence, which prevented that goal from being reached before institutional funding expired. Patients were enrolled if they were aged 18â€”80 years and were scheduled to undergo hand-assisted laparoscopic removal of a single kidney for either tumor or living donor nephrectomy. Patients who were converted to open surgery due to intraoperative complications were considered a screen failure and were excluded from further participation in the study. Participants were randomized in a double-blind fashion. The randomization chart was prepared by the statistician using the permuted block approach to achieve equal numbers of participants in each group. Participants received either 20 mL of 0. The study medication or placebo was dispensed by the operating room pharmacy and was not disclosed to the anesthesiologist performing the block, administering the anesthesia during the case, or performing the evaluations postoperatively. Patients were given mild sedation consisting of midazolam and fentanyl at the discretion of the investigator prior to administration of the block, as per standard clinical care. They then underwent bilateral TAP block immediately before surgery in the preoperative holding bay. Fentanyl was not administered after initiation of skin closure. No pre-emptive antiemetics were administered. Postoperatively, participants were given intravenous patient-controlled morphine analgesia dosed at 1 mg with an 8-minute lockout. Rescue doses were administered at the discretion of the attending physician. Ideally, only morphine sulfate was to be used for breakthrough pain. If another opioid was administered, we converted the dose, using standard tables, to morphine equivalents. We assessed pain score at rest and with movement using a VAS at 0, 2, 6, 12, and 24 hours postoperatively. Pain scores were recorded as 0 no pain to 10 worst pain ever. Additionally, we assessed the time to first request for analgesia and the total amount of morphine at each time interval. We also assessed the presence of postoperative nausea and vomiting, the need for rescue antiemetics, and the level of sedation recorded as 0 awake and alert , 1 appears asleep but awakes easily , 2 asleep, difficult to arouse , or 3 deep sleep. All patients complaining of nausea and requesting an antiemetic were treated with

ondansetron 4 mg. This dose could be repeated if needed. Surgical exposure was obtained using either a 7 cm supraumbilical or infraumbilical midline incision and 2â€”3 laparoscopic port entry sites as determined by the surgeon. Incisions for the port sites ranged from 5 mm to 12 mm and were on the ipsilateral side. Intra-abdominal insufflation with carbon dioxide was limited to 15 mmHg. REDCap is a secure, web-based application designed to support data capture for research studies. It provides an interface for data entry, audit trails, automated export to statistical programs, and procedures for importing data from an external source. The data were analyzed using SAS version 9. With the smaller than planned sample size, the possibility of a type II error should be considered when interpreting the results. Results The characteristics for all 21 participants and for those in the placebo versus active treatment groups are summarized in Table 1. The median operative time was minutes in the active treatment group and minutes in the group that received placebo, while median length of stay was 2 days in both groups. There were no complications related to TAP block placement. Table 1 Patient characteristics Notes: Comparison of postoperative opiate consumption between the two groups is summarized in Table 2. Median hour total opiate consumption was lower in the active treatment group than in the placebo group Table 2 Postoperative morphine consumption Notes: PCA, patient-controlled morphine analgesia. Post-surgical abdominal pain, as measured by the VAS, was compared between the two groups Table 3. Although we did not formally evaluate the trend in pain scores over time, there is some evidence of a trend toward increased pain scores over the hour post-surgery time period in the placebo group Table 3. Table 3 Abdominal pain score post surgery at rest and with bending knee Notes: VAS, visual analog scale. The incidence of nausea and vomiting after surgery is compared between the two groups in Table 4. Table 4 Nausea and vomiting post surgery Notes: The post-surgery sedation scores are compared for the two patient groups in Table 5. Table 5 Sedation post surgery Notes: Discussion As ultrasound-guided techniques have improved the efficacy and safety of TAP blocks, there has been a renewed interest in their use to provide analgesia to the anterior abdominal wall. Multiple studies support the theory that TAP blocks are effective in controlling pain for a variety of upper and lower abdominal surgeries. In our small randomized study, there was a trend, albeit not statistically significant, towards a decrease in total opiate consumption in the 24 hours after nephrectomy among patients who received the TAP block compared with those who received a sham TAP block with saline placebo. This observation is consistent with prior published studies, which have shown improved pain control in the first 24 hours postoperatively. The resulting decrease in opioid consumption may also be the reason for the parallel decrease in incidence of nausea in the active group when compared with the placebo group. The benefit gained in pain relief at 24 hours did not translate to improved time to discharge or overall sedation scores. The use of TAP blocks in transplant anesthesia is growing. They have been described for kidney transplant recipients, 2 , 3 , 5 liver transplant, 17 and in control of immediate postoperative pain following pancreas transplant. Additionally, total morphine consumption was significantly less in the first 6 hours active, Due to the finite duration of action associated with a single injection of local anesthetic, addition of a catheter for continuous infusion may improve pain control in these patients. Jankovic et al 3 described intraoperative placement of a catheter by the surgeon into the space between the transversus muscle and the internal oblique. This resulted in improved pain control in seven patients when compared with a historical group. They found that prior attempts to place the catheter transcutaneously resulted in a high failure rate. Subcostal approaches to catheter placement have been described. This study is not without limitations. Its small sample size prevented formal analysis of trends in opiate consumption, abdominal pain, nausea, vomiting, and sedation over time. Although we did find some significant differences between the two groups, our study still lacked power, and therefore the possibility of a type II error ie, a false negative association should be considered. Additionally, in order to maintain a blinded study, skin sensation was not assessed prior to surgery. In clinical practice, adequacy of the block would have been assessed prior to skin incision. In an attempt to minimize this variance, ultrasound was used and a regional anesthesiologist with experience in TAP blocks performed the procedures. In summary, we found that TAP blocks reduced overall pain scores at 24 hours, with a trend toward decreased total morphine consumption. Further large-scale studies should be undertaken to fully evaluate the clinical utility of this technique in renal transplant patients as well as in patients undergoing resection for tumor. Disclosure The

authors report no conflicts of interest in this work.

2: Clinical sonography : a practical guide - ECU Libraries Catalog

Thomas C. Winter, MD, Fred T. Lee Jr, MD, and J. Louis Hinshaw, MD Abstract: Ultrasound-guided biopsies in the abdomen and pelvis are generally more effective, safer, faster, and cheaper than those.

3: National Diagnostic Imaging Symposium | Radiology | CMEinfo |

Right lower quadrant pain / Gretchen M. Dimling, Roger Sanders -- Possible adrenal mass / Thomas C. Winter -- Possible renal mass / Tim Walker, Thomas C. Winter -- Renal failure / Barb Vanderwerff, Thomas C. Winter -- Unexplained hematocrit drop rule out perinephric hematoma: possible perinephric pass / Barb Vanderwerff, Thomas C. Winter.

4: Clinical sonography [print] : a practical guide in SearchWorks catalog

Ultrasound-guided techniques / Thomas C. Winter Nursing procedures / Deroshia Stanley Work-related musculoskeletal disorders (WRMSD) in sonography / Carolyn Coffin, Susan Murphy.

5: Clinical sonography : a practical guide - ECU Libraries Catalog

This symposium is structured as a practical, clinically focused review of diagnostic ultrasound featuring urgent scanning procedures and techniques. A mix of ob-gyn, abdominal, and vascular lectures provide a well-rounded review of clinical imaging techniques.

6: Thomas C Winter, MD - Salt Lake City, UT, US - Radiology | Health Gorilla Secure Clinical Network

Get this from a library! Clinical sonography: a practical guide. [Roger C Sanders; Thomas C Winter;] -- This textbook is appreciated for its clear, concise writing, consistent format, and problem-based organization.

7: IAME - Winter, Thomas

The speaker discusses coagulation guidelines in interventional US. Upon completion of this educational activity the participant should be able to describe coagulation guidelines for pre-procedure laboratory testing and discuss peri-procedural anticoagulation.

8: New books listed on The Online Books Page

Thomas C Winter has expertise in Medicine. but more advanced colonography techniques are necessary for detecting large polyps. Ultrasound-guided biopsies in the abdomen and pelvis are.

9: Clinical sonography : a practical guide - NOBLE (All Libraries)

Ultrasound-guided biopsies in the abdomen and pelvis are generally more effective, safer, faster, and cheaper than those performed under computed tomography www.enganchecubano.com manuscript will discuss multiple aspects of sonographic biopsies performed between the diaphragm and the symphysis pubis.

ULTRASOUND-GUIDED TECHNIQUES THOMAS C. WINTER pdf

V. 2. Applications and case studies. New York Ranger Media Guide, 1995-1996 Picturesque Brittany . A dialogic account of authority in academic writing Ramona Tang Keeps printing to manual feed A relation of the great river of Amazons in South-America Analysis and design of hydraulic structures Short Vowel Word Machines Pinner to Paradise Normalcy and reaction, 1921-1933 The Spacemaker Book (Wallaby Book) Cooking the nouvelle cuisine in America Complete Encyclopedia of Hockey Plasma Processes and Polymers Cbse class 12 previous year question papers with solutions Race, ethnicity, and justice U2022 Buddha died, 65 suffered for three days in hell, 66 and was resurrected.67 Research ethics in content analysis Nancy Signorielli Modeling of Jovian hectometric radiation source locations Germans in Wisconsin The complete birdhouse book Adventures with the missing link Darwin and the nature of species Texts and calendars II Domestic life of Thomas Jefferson KJV Large Print Reference Navy People at the Center of The War of 1812 (People at the Center of) Sap pi configuration guide Studies on the Jurchens and the Chin dynasty Wisdom: advanced creativity? Guy Claxton V. 16 The support of the family. La Belle-nivernaise. The English tribe The shrunken Europe of Maurice Barrs Honda motorcycle identification guide Australian decimal stamps, 1966-1978 A dangerous new world World a department store Motivating others to think and act sustainably SC Volume 83 Shakespearean Criticism Discovering the Amazon Rainforest (Discovery Series (Don Mills, Ont.).)