

questionnaires and recovery specific questionnaires have been used to measure recovery in surgical patients. The aim was to evaluate the clinimetric properties of three recovery instruments in hysterectomy patients.

Design: Prospective observational study. The Quality of Recovery-40 (QoR-40), Recovery Index-10 (RI-10) and RAND-36 health survey were used to measure recovery in patients undergoing different types of hysterectomy in the first 12 weeks after surgery.

Setting: Single centre teaching hospital, experienced in gynecological minimal invasive surgery.

Patients: One hundred and sixty-one women undergoing hysterectomy by vaginal (n=21), laparoscopic (n=64) and abdominal approach (n=76).

Intervention: Hysterectomy.

Measurements and Main Results: Response rate (94%) and internal consistency (0.93, 0.81 and 0.86 respectively) were found satisfactory. The highest number of hypotheses used for construct validity assessment was confirmed in the RI-10. The RI-10 was more responsive as compared with the QoR-40 and RAND-36.

Conclusion: The recovery specific quality of life questionnaires measured postoperative recovery more validly as compared with the general health-related quality of life questionnaire. We recommend the use of the RI-10, unless the immediate postoperative days are of interest in which the QoR-40 was valid.

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Women's Preference for Laparoscopic or Abdominal Hysterectomy

¹Kluijvers KB, ²Opmeer BC. ¹Radboud University Medical Centre, Nijmegen, Netherlands; ²AMC, Clinical Epidemiology, Amsterdam, Netherlands

Study Objective: Laparoscopic hysterectomy and abdominal hysterectomy are alternative approaches to hysterectomy in women with a moderately enlarged uterus. Both strategies have advantages and disadvantages, and the optimal strategy depends on a trade-off of pros and cons. This study was conducted to assess women's preferences regarding this clinical dilemma.

Design: Prospective observational study.

Setting: A teaching hospital and university hospital.

Patients: Forty-three (43) hysterectomy patients and 39 nurses.

Intervention: Laparoscopic hysterectomy (LH) and abdominal hysterectomy (AH) in the patients group.

Measurements and Main Results: Patients' preferences were evaluated in individual and structured interviews. Specific advantages and disadvantages of LH and AH were explained, after which preferences for either LH or AH were assessed. A questionnaire identical to the interview was completed by a group of nurses. The interview addressed preferences for either LH or AH, thereby trading-off risks of major complications and risks of conversion from LH to

AH. In addition, importance of individual factors influencing the preferences and thresholds for complication rates in hysterectomy and conversion rates in LH were studied. Following global information on both approaches, 84% of patients and 74% of nurses preferred LH over AH. This preference did not change with more detailed information or after experiencing hysterectomy in the near past. Although the avoidance of complications was indicated as the most important influencing factor, only 15% of women regarded a doubled risk of major complications in LH as unacceptable. More than half of the women perceived 1% as the maximum acceptable major complication rate.

Conclusion: Women preferred LH over AH. The avoidance of complications was regarded as the major issue of concern, and the actual major complication rate in hysterectomy was perceived as high.

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Nebula: A New Approach to Video Documentation in Endoscopic Surgery

Koninckx PR. Leuven, Belgium

Study Objective: Videodocumentation.

Design: Nebula runs on laptop or PC and accepts any form of analog or digital input. Besides still pictures, two videostreams can be simultaneously recorded, one in archiving quality and one in high presentation quality. On the video an unerasable watermark, time, and the identity of patient and surgeon can be printed. An electronic watermark ensures the integrity of the video. Storage is simultaneous on the hard disk, on a CD/DVD and on the hospital network. The archiving quality uses temporal, spatial and mathematic compression. All operations are logged in a searchable database, allowing to trace interesting clips, through annotations and markers. Data life cycle management can move over-aged data to offline storage, with automatic stronger compression and information of the owner. The presentation clips are top quality video without a compromise between the amount of data. Simple postprocessing permits to generate videoclips for presentations.

Setting: University Hospital, KULeuven.

Patients: A consecutive series of over 500 patients.

Intervention: All interventions performed by PK during 1 year.

Measurements and Main Results: We recorded all procedures in archiving mode. Data compression permits to store 2 full days of surgery on 1 DVD. Still pictures are taken, selected at the end of surgery and inserted into the patient file. Interesting clips or procedures were simultaneously recorded when desired and postprocessing was generally done between surgeries. The archiving clip has been used for documentation, patient information and for review in case of complications, or for medicolegal protection.

Conclusion: This new approach for video recording permits realistic storage and retrieval of entire procedures, either as one DVD/week or centralized on the hospital network, or a

combination. Videos can be encrypted to prevent subsequent modification. Simultaneously, still pictures and high quality clips can be recorded, which together with the editing tool makes it easy to generate videoclips for presentations.

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Total Laparoscopic Hysterectomy and Laparoscopic Assisted Vaginal Hysterectomy

¹Kopjar M, ¹Viskovic T, ²Langroudi MH. ¹Croatian Society for Gynaecological Endoscopists, Zabok, Croatia; ²Geisinger Medical Center, Danville, Pennsylvania

Study Objective: To show with this work results of laparoscopic hysterectomies performed at Ob/Gyn Department General Hospital Zabok, Croatia from 1994. - 2006.

Design: First laparoscopic hysterectomy was performed in 1988. In our department we started to perform laparoscopic hysterectomies in 1994. Hysterectomy is most commonly performed procedure in gynecology. Laparoscopic hysterectomy is an alternative to abdominal hysterectomy. Most hysterectomies requiring the abdominal approach can be done laparoscopically, with the patient benefiting from avoidance of painful abdominal incision, reduced hospital stay and recovery and low rate of infection and ileus.

Setting: Department of Obstetrics and Gynecology, General Hospital, Zabok, Croatia.

Patients: From 1994. - 2006. at our department 419 laparoscopic hysterectomies for benign indications were performed. There were 388 TLH and 31 LAVH.

Intervention: Total laparoscopic hysterectomy (TLH), laparoscopic assisted vaginal hysterectomy (LAVH) and laparoscopic intraperitoneal Burch colposuspension.

Measurements and Main Results: The most common indications was fibroid uterus complicated with AUB or lower abdominal pain in 277 cases, stress urinary incontinence in 41 case (in most cases intraperitoneal laparoscopic Burch colposuspension was performed as joined procedure), AUB in 53 cases, adnexal mass in 48 cases, etc. In all cases we used 4 abdominal entry ports. Primary trocar with optics was introduced paraumbilically, two 5 mm ports in lower quadrants, and one 10 mm port in upper left quadrant. In all cases Clermont Ferrand uterus manipulator was used for better exposure of structures. Haemostasis was achieved with bipolar coagulation, in some cases with chronic parametritis, the suture to lateral parametria was placed, and in 8 cases the metal clip for uterine artery was applied. Vaginal vault was closed laparoscopically with McCall culdoplasty using two O-Vycril sutures tied extracorporeally. Complications occurred in 3.6 % of cases, there were 4 bladder injuries, 8 ureter injuries, and 3 intestinal injuries (two mechanical trauma of large intestine, and one electrical trauma to the small intestine). There were no injuries to large blood vessels. Significant blood loss occurred in 9 patients, and blood transfusion was given intraoperatively or in a few postoperative days. Average hospital stay was 6

days. Overall average operative time was 175 minutes (2h 55min), and operative time in 2006. only was 115 min (1h 55 min). The average weight of the removed uterus was 407 grams (range 80 – 2700 grams).

Conclusion: Since laparoscopic hysterectomy become routine procedure at our department in the last few years, there has been significant decrease in the number of abdominal hysterectomies performed. In the same time the number of vaginal hysterectomies remained constant. This shows that laparoscopic hysterectomy is alternative to abdominal hysterectomy. Hospital stay was prolonged not because of patient condition, but due to administrative reasons (shorter hospital stay means less money for the hospital). Ureteral injuries occurred mostly in the first few years since we started performing this procedure. We believe that the visualization of ureter is the crucial step of the procedure. Bipolar coagulation of infundibulopelvic ligament, and uterine vessels appears to be safe method of hemostasis.

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Total Laparoscopic Hysterectomy Using Ligasure Uterine Artery Sealing Device- Experience at AIIMS

Kriplani A, Garg P, Agarwal N. AIIMS, Ansari Nagar, New Delhi

Study Objective: To evaluate the efficacy and safety of total laparoscopic hysterectomy using ligasure for sealing of uterine arteries.

Design: A retrospective review of 110 cases of total laparoscopic hysterectomy.

Setting: Tertiary care teaching hospital, Department of obstetrics and gynecology, All India Institute of medical Sciences, New Delhi, India.

Patients: A total of 110 patients underwent total laparoscopic hysterectomy for benign uterine pathology.

Intervention: Total laparoscopic hysterectomy. Technique was made simplified using ligasure (Valleylab Inc., Boulder, Colorado, USA) for sealing of uterine arteries and Prashant Mangeshikar uterine manipulator.

Measurements and Main Results: The mean age of the patients was 43.1 ± 0.602 years and mean BMI was 25.19 ± 0.39 kg/m². The median operating time was 120 minutes (range 45-210 minutes) and median intraoperative blood loss was 150ml (range 30-600ml). The weight of uterus varied from 60gms to 970 gms (median 120 gms). Six patients (5.4%) were converted from a laparoscopic to an open procedure (large myoma in 4, dense adhesion in 2) and one (0.9%) converted to LAVH (tear in vaginal cuff). The intraoperative complication was observed in one (0.9%) patient (lung emphysema). Postoperative complication included sub acute intestinal obstruction in 3, retention of urine in 2 and febrile morbidity in 2 patients. There were no bladder or bowel injuries.

Conclusion: Total Laparoscopic hysterectomy is a safe and efficient procedure with low complication rate. The operative technique was found to be simple by using ligasure.