

Comparison of the perioperative outcomes of vessel sealing instrument –assisted technique hysterectomy with conventional hysterectomy

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Context: Despite limited evidence in literature, hospitals are rapidly acquiring new surgical instruments and using it routinely in gynecologic surgery. This fast adoption and diffusion raises important questions about the real advantages.

Objective: To analyze the result of comparison of conventional total open hysterectomy (TOH) vs open total hysterectomy with the use of Electrothermal bipolar vessel sealing devices (LigaSure™) (TOHL), in terms of perioperative outcomes.

Methods: Patients were matched by age, body mass index, comorbidity, preoperative hemoglobin to obtain homogeneous samples. 36 cases of TOH were compared with a matched control group of 31 TOHLs.

Patient(s): 67 consecutive patients with benign pathology recruited from February 2012 to July 2015.
Intervention(s): TOH and TOHL; histologic endometrial sample was obtained before surgery, in case of a thickened endometrium.

Main Outcome measure(s): Data were collected prospectively. Surgical time(ST), changes in hemoglobin, estimated blood loss(EBL), hospital stay(HS), and short time complications were collected. T-test for numeric variables and Chi-squared test for categorical variables were used. SPSS17 software was used to perform statistical analysis.

Results: Mean age was 48,5 years(SD±1,7) and 48,2(SD±1,9), respectively in TOH and TOHL group. ST was less in TOHL group (112,2;SD1±3,5min vs.68,5;SD+/-9,1)(p=0,000).TOHL was associated with significantly less EBL (355,3;SD±95,3ml vs 151,6;SD+/-38;p=0,000),less HS and major value of post-operative hemoglobin. Complications concerned only the sutures with 11.1% and 9,7% respectively, for TOH and TOHL group.

Conclusion: The use of LigaSure can shorten HS without worse surgical outcomes. The favorable outcome of this study, indicates that the vessel sealing instrument –assisted technique is feasible and effective in reducing operation times and represents the better hemostatic strategy.

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