Minilaparoscopic radical hysterectomy for cervical cancer: multi-institutional experience in comparison with conventional laparoscopy.

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Abstract

OBJECTIVE: To analyze the preliminary experience of three gynecologic oncology services with minilaparoscopic radical hysterectomy (mLRH) for the treatment of cervical cancer and to compare perioperative outcomes with those of conventional laparoscopic surgery (LRH).

METHODS: Prospectively collected data on consecutive cervical cancer patients undergoing radical hysterectomy with a laparoscopic approach were analyzed retrospectively. Perioperative outcomes of women undergoing mLRH were compared to data from control patients who had undergone LRH with 5-mm instruments. Adjustment for potential selection bias in surgical approach was made with propensity score (PS) matching.

RESULTS: The study cohort consisted of 257 patients, 35 undergoing mLRH and 222 undergoing LRH. The two groups were comparable in terms of demographic and tumor characteristics. No significant differences were observed between groups in terms of operative time, blood loss, lymph node yield, amount of parametrial or vaginal cuff tissue removed, and percentage of intra- or postoperative complications, both in the entire cohort and in the PS matched group. No conversions were needed from mLRH to standard laparoscopy or from minilaparoscopy to open surgery. Conversion from standard laparoscopy to open surgery was necessary in 2 patients. A shorter hospital stay was observed among women who had mLRH than in those undergoing LRH [2 (1-10) vs 4 (1-14) days, p = 0.005]. This difference remained significant after PS matching.

CONCLUSION: Our preliminary study suggests that in experienced hands minilaparoscopy is a feasible and safe technique for radical hysterectomy and yields results that are equivalent to those of LRH.

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