Laparotomy vs. laparoscopic approach in managing early endometrial cancer: Comparative analysis from a single institution

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ABSTRACT

Objective: Endometrial cancer is one of the most prevalent gynecological malignancies worldwide. Surgical intervention plays a crucial role in the treatment of endometrial cancer, aiming to achieve optimal oncologic outcomes while minimizing surgical morbidity. The advantages of laparoscopic surgery are well-known in high income countries. However, laparoscopic surgery in developing countries is still variable, primarily due to economic reasons and longer learning curve. This research aims to compare between laparotomy and laparoscopic approaches for treatment in early endometrial cancer. Materials and Methods: We retrospectively investigated 150 patients diagnosed with Stage 1 endometrial cancer who underwent surgery in Institut Kanser Negara between 2018 and 2022. Surgical outcomes and perioperative complication were evaluated. Results: 97 patients (64.7%) underwent laparoscopic surgery and 53 patients underwent laparotomy surgery. The surgical procedure was converted from the laparoscopy to laparotomy in 3 cases due to bleeding and severe adhesion. Median operation time and total number of lymph nodes harvested in both groups were not statistically different (p>0.05). However, the length of hospital stays, 4 days (4-5) vs 7 days (6-9) (p<0.05) and estimated blood loss, 250 mL (100-400) vs 410 mL (250-600) (p<0.05) were significantly lower in the laparoscopic group. Perioperative complication rate was higher in laparotomy group consist of 6 cases (4%) and the laparotomy group was 3 cases (2%) respectively. Conclusions: This study reveals that laparoscopic surgery had benefit in postoperative recovery. In conclusion, laparoscopic surgery, when performed by surgeons with expertise in gynecologic oncology, has been shown to be safe and viable option for managing early-stage endometrial cancer.