



LAPAROSCOPY FOR ENDOMETRIOID CYSTS: FEASIBILITY, TECHNIQUE, AND PROGNOSIS

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Annotation

This article examines the feasibility, methodology, and prognosis of laparoscopic surgery in the treatment of endometrioid cysts. The study emphasizes the advantages of laparoscopy, including minimal invasiveness, faster recovery, and lower recurrence rates compared to traditional surgical methods. The analysis also focuses on the selection of optimal surgical techniques based on cyst size, localization, and reproductive plans of patients. The outcomes demonstrate that laparoscopy remains the most effective and safe approach in managing endometrioid ovarian cysts, contributing to the preservation of ovarian function and improving reproductive health.

Keywords: laparoscopy, endometrioid cysts, ovarian preservation, reproductive function, surgical treatment, prognosis

Endometrioid cysts, or endometriomas, represent one of the most common manifestations of endometriosis, significantly affecting women of reproductive age. The choice of an appropriate surgical approach plays a crucial role in maintaining ovarian reserve and preventing disease recurrence. In recent years, laparoscopy has become the preferred method due to its minimal trauma, improved visualization, and shorter rehabilitation period. However, the success of the procedure depends on the surgeon's experience, accurate diagnosis, and individualized surgical tactics. This article explores the clinical rationale for performing laparoscopic surgery in patients with endometrioid cysts, discusses the main stages of the procedure, and evaluates postoperative outcomes to determine its effectiveness and safety.

Laparoscopic surgery for endometrioid cysts has become the gold standard in modern gynecological practice due to its effectiveness, precision, and low



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invasiveness. Unlike open laparotomy, laparoscopy allows for detailed visualization of the pelvic organs and more accurate excision of endometrioid lesions while preserving healthy ovarian tissue. This is particularly important for women of reproductive age who plan future pregnancies.

During laparoscopy, three main steps are typically performed: diagnostic inspection, removal of the cyst capsule, and coagulation or vaporization of endometrial implants. Careful dissection of the cyst wall is essential to minimize trauma to the ovarian cortex and maintain hormonal and reproductive functions. The use of high-definition optical systems and fine surgical instruments enhances the accuracy of the procedure and reduces intraoperative complications such as bleeding or damage to adjacent organs.

An important aspect of the surgical methodology is the prevention of recurrence. Studies have shown that complete excision of the cyst capsule significantly lowers the risk of recurrence compared to drainage or partial removal. Moreover, adequate coagulation of endometriotic foci and restoration of normal pelvic anatomy contribute to improved postoperative outcomes. In some cases, hormonal therapy is recommended before or after surgery to suppress residual endometrial tissue and stabilize the hormonal background.

Postoperative rehabilitation is typically rapid, with most patients discharged within 1–2 days after the operation. Recovery of ovarian function is usually observed within a few weeks. The majority of women experience relief from pain and improvement in menstrual regularity. In reproductive-age patients, laparoscopy significantly increases the chances of natural conception due to restored ovarian and tubal function. Prognosis largely depends on several factors: the size and number of cysts, the presence of adhesions, the stage of endometriosis, and the surgeon's qualifications. Repeated surgeries or inadequate removal of cysts can lead to a decrease in ovarian reserve. Therefore, a personalized approach is essential — taking into account the patient's age, reproductive plans, and hormonal status.

Laparoscopy for endometrioid cysts combines both therapeutic and diagnostic advantages. It provides accurate diagnosis, effective removal of lesions, rapid recovery, and minimal postoperative complications. With proper surgical technique



and individualized planning, it remains one of the safest and most promising methods for the treatment of endometriosis-related ovarian cysts.

Conclusion

Laparoscopic treatment of endometrioid cysts has proven to be a highly effective, minimally invasive, and fertility-preserving surgical approach. It allows precise removal of cystic formations with minimal trauma to ovarian tissue, ensuring faster recovery and a lower recurrence rate compared to traditional methods. The success of the operation largely depends on the surgeon's experience, the extent of the disease, and the application of an individualized approach tailored to each patient's reproductive plans and hormonal status.

The use of modern laparoscopic technologies significantly enhances visualization and surgical accuracy, which leads to better functional and reproductive outcomes. Moreover, comprehensive postoperative management, including hormonal therapy when indicated, contributes to the long-term stability of treatment results and prevention of relapse.

In summary, laparoscopy remains the method of choice in the surgical management of endometrioid cysts, combining therapeutic efficiency, diagnostic precision, and a favorable prognosis for women's reproductive health. Its implementation within an integrated treatment strategy ensures the best balance between radical disease control and preservation of fertility, making it an indispensable part of modern gynecological practice.

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