

# Laparoscopic Surgical Management of an Iatrogenic Tubo-ovarian Abscess Following Hysteroscopy in a Sexually Inexperienced Female

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## OBJECTIVE

The objective of this study was to demonstrate effective surgical methods to facilitate laparoscopic salpingo-oophorectomy for tubo-ovarian abscess (TOA) in a patient with a frozen pelvis.

## DESIGN

This video article demonstrates various laparoscopic surgical techniques: (1) Blunt dissection using suction-irrigator apparatus and (2) proper use of bipolar electro-surgery devices for dissection and hemostatic applications.

## SETTING

A sexually inexperienced patient developed a TOA 5 to 6 weeks after she underwent a (hysteroscopic) transcervical resection of endometrial polyp.

## INTERVENTIONS

A 42-year-old, nulligravid, with no coital experience, developed sudden-onset lower abdominal pain accompanied by fever, 1 week following a hysteroscopic procedure. She endured the symptoms for 6 weeks until finally deciding to seek a consult. A magnetic resonance scan showed a thick-walled left adnexal cyst with marked diffusion restriction and fat stranding. This was signed out as pelvic inflammatory disease (PID) with a left TOA.

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A broad-spectrum course of antibiotics was given, without any improvement in her symptoms. A sonographic follow-up scan showed no decrease in the lesion size, hence surgical intervention was performed.

She underwent laparoscopic adhesiolysis, left salpingo-oophorectomy, appendectomy, and myomectomy [Figure 1 and Video]. The histopathological report showed an ovarian abscess with chronic inflammation of the fallopian tube, myoma uteri, and normal appendix. There were no postoperative complications after this surgery.

## DISCUSSION

A TOA is a complex infectious mass of the adnexa that most commonly affects sexually active women. It is usually a consequence of PID.<sup>[1-3]</sup> A TOA may form as an untoward consequence of a hysteroscopic procedure. This adverse outcome is rare, with an incidence rate of about only 0.2%.<sup>[4]</sup>

In this case, the patient was sexually inexperienced. Her pelvic abscess was most likely a complication of the hysteroscopic procedure.

The decision to perform laparoscopic surgery on this patient versus an open procedure, was based on the following merits of minimally invasive surgery (MIS): (1)

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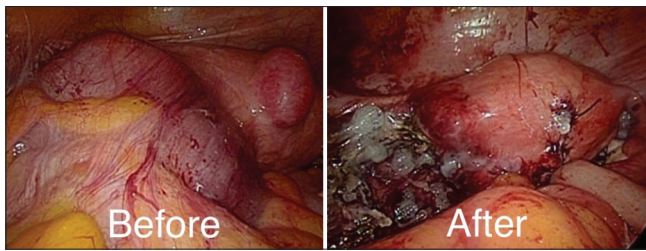
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**Figure 1:** Left tubo-ovarian abscess with frozen pelvis before and after laparoscopic surgery. Video: <http://www.apagemit.com/page/video/show.aspx?num=306&kw=Tubo-ovarian+abscess&page=1>

Decreased intraoperative blood loss, and consequently, blood transfusions, (2) shorter hospital stay, and (3) faster duration of the surgical procedure.<sup>[5-8]</sup> With these clear advantages, in mind, we pursued the less invasive surgical route.

## CONCLUSION

Gynecologists who perform hysteroscopy should be aware that there is a real possibility that a patient could develop postprocedural TOA or PID.

Effective management with antibiotics followed by mandatory surgery prevents the potential risk of morbidity and mortality associated with delayed treatment.

There is a clear advantage of MIS over open procedures such as decreased blood loss and transfusion rate, shorter operative times, and decreased length of hospital stay, and as such should be made the first choice in surgically managing TOA cases.

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## Conflicts of interest

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