

Objective:

A fresh Perspective on Current Standards in Antibiotic Prophylaxis for outpatient hysteroscopy.
This report highlights two cases of pelvic abscess following outpatient hysteroscopy, emphasizing the increased infection with predisposing factors such as pelvic inflammatory disease(PID) & endometriosis.

Case Report-

We encountered two complex cases during May 2024 to October 2024 period, among women who had outpatient hysteroscopy.

Case 1	Case 2	
A 38-year-old woman with a history of bilateral endometrioma’s underwent endometrial polypectomy during outpatient hysteroscopy. One week later, she presented with general unwellness. Ultrasound revealed a pelvic abscess with an endometrioma. Laparoscopic drainage of the pelvic abscess was performed, & cultures confirmed the presence of <i>Escherichia coli</i>. She recovered well following the procedure.	A 45-year-old woman with a history of bilateral endometrioma’s & deep infiltrating endometriosis. Has undergone laparoscopic adhesiolysis & drainage of a pelvic abscess in May 2024. She underwent outpatient hysteroscopy in October 2024. Ten days post-procedure, presented again, with a large pelvic abscess, necessitating CT-guided drainage. Cultures confirmed Escherichia coli infection. Despite initial management, she experienced a recurrent abscess two weeks later, requiring another CT-guided drainage. She was subsequently scheduled for laparotomy.	 Case 1Case 2 Images: CT abdomen & pelvis showing large multi-septate pelvic abscess.

Discussion:

- Procedures performed via the vaginal route, like hysteroscopy, may introduce pathogens into the uterine cavity.
- The risk of infection is heightened with risk factors such as smoking, PID & endometriosis. Endometriosis, in particular, predisposes to infections due to altered immune function & distorted pelvic anatomy.
- Routine antibiotic prophylaxis for outpatient hysteroscopy is not currently recommended by guidelines (e g; RCOG green top guideline, ACOG, RANZCOG and Cochrane review), as the baseline infection risk is low.
- A meta-analysis by Muzii et al. found no definitive evidence to support routine prophylaxis for hysteroscopy. However, the lack of high-quality studies & the rarity of severe complications make it difficult to draw firm conclusions.
- However, these cases underscore the importance of individualized risk assessment & prophylactic strategies for high-risk patients.

Conclusion:

- The risk of infection following hysteroscopy is low, but severe infections, such as pelvic abscesses, can occur, particularly in high-risk patients. They can be even fatal.
- The cases presented here emphasize the importance of vigilance in identifying & addressing risk factors, even for procedures typically considered safe.
- To bring attention to the importance of tailored prophylaxis of antibiotics for individuals with risk factors like endometriosis, smoking, or PID.
- Further research, including well-designed multicentre trials, are necessary to guide evidence-based prophylactic strategies for preventing post-procedural infections in high-risk populations.