

# Inguinal Endometriosis; Diagnostic Considerations & Management



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## Background

Endometriosis is a common gynaecological condition in women of reproductive age however the inguinal region is an unusual location of disease<sup>1</sup>. In particular, isolated inguinal hernia sac endometriosis, as region of first diagnosis is rare<sup>1</sup>. As seen in this case, the majority of cases occurs in right side with 90% reported in literature<sup>2</sup>. Inguinal endometriosis (IE) shares similar presentation features and symptoms to incarcerated inguinal hernias and may be a diagnostic conundrum.

## Case

A 20 year old nulliparous female presented with a right sided inguinal lump, her pain and swelling worse during menstruation. She had no other previous surgical or medical history. The mass was non-reducible with features of a femoral hernia. Ultrasound reported a lobulated hypo-echoic fluid filled structure within the inguinal canal above the superficial ring. Further imaging modalities were considered but not deemed suitable in this particular case with consideration of future fertility.

Based on clinical findings suspecting groin hernia, the patient underwent laparoscopic mesh repair of hernia. Surgery confirmed a right side indirect inguinal hernia arising from a patent indirect sac. The sac was reduced with traction and on routine transection chocolate brown fluid escaped. Mesh was placed in the pre-peritoneal plane over the defect to complete the herniorrhaphy. Histopathology of sac and cystic contents showed an inguinal hernia sac with endometriosis. Her postoperative recovery was unremarkable.

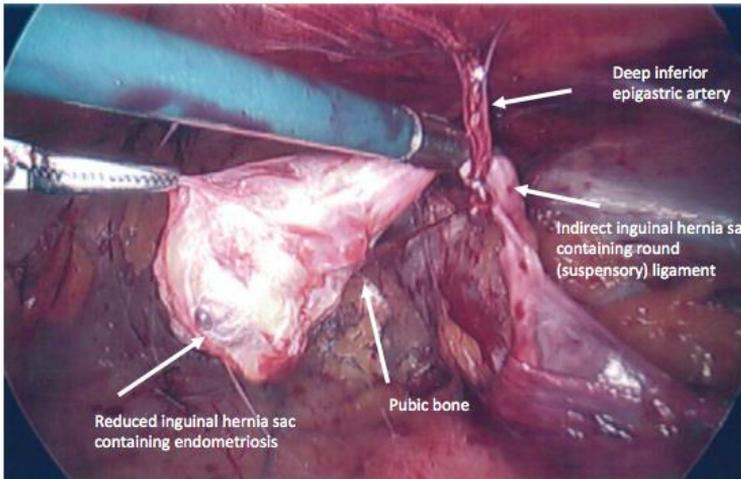


Fig 1: Intraoperative excision of inguinal endometriosis

## Discussion

Inguinal endometriosis may be diagnosed incidentally intra-operatively or on histology. MRI can be considered to further evaluate inguinal lumps suspecting IE and other endometriosis deposits pre-operatively. Proposed pathophysiology includes atypical lymphatic flow from the intrapelvic cavity to the right inguinal cavity or presence of clockwise intraperitoneal fluid circulation<sup>1,2</sup>. Simultaneous pelvic endometriosis may be associated with IE and preoperative evaluation is essential. Complete surgical excision (Fig 1) with gynaecology follow-up is the recommended treatment with low recurrence rate and malignant transformation seldom reported<sup>1</sup>.

## Conclusion

Extra-pelvic endometriosis is an infrequent but should be a differential diagnosis considered when investigating inguinal masses in women. They are often diagnosed during an operation for inguinal hernia repair. Prompt diagnosis and whole resection of the lesions with gynaecology followup is recommended for treatment.

## References

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