Migrated Filshie clip causing ischiorectal abscess

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DESCRIPTION
A woman in her 40s was referred to us for review of her perianal swelling and pain. Her medical history included iron-deficiency anaemia and previous tubal ligation 11 years ago. She presented to her general practitioner with a few months’ history of perianal pain and swelling. She was diagnosed with a perianal abscess and was initially treated with oral antibiotics with some improvement in symptoms. However, she re-presented with ongoing perianal swelling and discharge. She was reviewed by a colorectal surgeon and MRI of the pelvis was organised. This demonstrated an apparent complex fistula-in-ano arising from the anorectal junction at the 8 o’clock position, associated with a 30 mm partial horseshoe abscess that ended within the left ischiorectal fossa (figures 1 and 2). Based on the MRI finding and ongoing symptoms, the decision was made to proceed to examination under anaesthesia with incision and drainage of the perianal abscess. Intraoperative findings included a foreign body within the large left ischiorectal fossa abscess cavity, found to be a Filshie tubal ligation clip (figure 3), but no obvious fistula-in-ano. The patient recovered well postoperatively, and her perianal wound gradually healed.

The Filshie clip is a silicone-lined titanium clip that locks across the fallopian tube, inducing avascular necrosis to leave two blind-ending tubal stumps. Tubal occlusion/ligation via Filshie clips constituted the primary contraceptive method for 5.7% of Australian women in 2016.1 Advantages of the Filshie clip over electrocautery include its increased reversibility, reduced risk of ectopic pregnancy and relative procedural ease.2 However, Filshie clips are not without complications. Notably, migration across tissue planes has been estimated to occur in 0.6 in 1000 cases.3 Although still unclear, a hypothesised mechanism for migration involves delayed peritonealisation and a local inflammatory response.4 Migrated Filshie clips are most commonly located within the pouch of Douglas or in the paracolic gutters, remaining asymptomatic.4 Nevertheless, symptomatic cases can occur secondary to Filshie clip expulsion, herniation or abscess formation, with presentation ranging widely from 6 weeks to 34 years post sterilisation.5–8 Only two other cases of perianal abscess
due to Filshie clip migration have been described in the literature.\textsuperscript{7,9}

The probable pathophysiology of Filshie clip-induced abscess formation may involve the clip inducing local inflammation, and/or acting as a nidus for infection. The foreign body, along with pyogenic bacteria and necrotic tissue, induces abscess formation; where local inflammation leads to the release of chemotactic factors that recruit neutrophils to the relevant site.\textsuperscript{10}

Resistance of the foreign body to phagocytosis by neutrophils leads to chronicity of the abscess, with the formation of a fibrous capsule to isolate the area.\textsuperscript{10} Through this local tissue inflammatory response, a dislodged Filshie clip in the pelvis can then cause ulceration, fistula formation, tissue induration and abscess formation, leading to expulsion via the perianal or ischiorectal tissues.\textsuperscript{11,12}

Filshie clip migration triggering abscess formation is a rare but significant complication of a tubal occlusion procedure. Hence, thorough history taking is imperative, and migrated clips or a foreign body should be considered in unusual/persistent presentations of perianal abscess.

**Learning points**

- Filshie clip migration triggering abscess formation is a rare but significant complication of a tubal occlusion procedure.
- Thorough history taking, especially surgical history, may aid in determining underlying aetiology in unusual/persistent presentations of perianal abscess.

**Contributors**

The following authors were responsible for drafting of the text, sourcing and editing of clinical images, investigation results, drawing original diagrams and algorithms, and critical revision for important intellectual content: AC, RL, MJ and EO. The following authors gave final approval of the manuscript: AC, RL, MJ and EO. The following authors gave critical revision for important intellectual content: AC, RL, MJ and EO. The following authors gave final approval of the manuscript: AC, RL, MJ and EO.

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Case reports provide a valuable learning resource for the scientific community and can indicate areas of interest for future research. They should not be used in isolation to guide treatment choices or public health policy.

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**REFERENCES**