



Case Report

The Rare Case of the Migrated Tubal Ligation Clip Presenting As a Bladder Stone

Marcus Way Lunn Chow^{1*}, Sarvajit Biligere²

¹Department of Urology, Tan Tock Seng Hospital, Singapore

²Division of Urology, Department of General Surgery, Ng Teng Fong Hospital, Singapore

*Corresponding author: Marcus Way Lunn Chow, Department of Urology, Tan Tock Seng Hospital, Singapore

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Abstract

Introduction: The use of Filshie clips for tubal ligation is a common form of contraception. Migration of Filshie clips is a rare but well published complication. We report what we believe is the first case of a Filshie clip migrating completely into the bladder and presenting as a bladder calculus approximately 40 years post-insertion. **Case presentation:** A 73 year old lady presented with gross hematuria with no other associated symptoms. A CT Urogram and flexible cystoscopy revealed a right posterolateral bladder diverticulum with a 2.1 x 1.4 cm calculus within and no other urinary tract abnormality. She had undergone a previous tubal ligation approximately 40 years ago. She subsequently underwent a rigid cystoscopy and cystolithotripsy. Intra-operatively, during laser cystolithotripsy, a Filshie clip was seen at the core of stone. After completion of cystolithotripsy, the Filshie clip was easily removed with a grasper. The wall of the bladder diverticulum was inspected and appeared normal and intact. The patient recovered well post-operatively and was discharged on post-operative day 1. **Conclusion:** Filshie clip migration is rare occurrence. There are multiple case reports describing the migration of Filshie clips. This case adds to the existing literature as a potential rare late complication of migrated Filshie clips. It raises awareness that patients with previous tubal ligation may present with complications as late as 40 years post-insertion.

Introduction

Tubal ligation is a common form of female contraception, of which the majority are performed using the Filshie clip [1]. The Filshie clip, a device made from titanium and silicone is applied laparoscopically and serves to occlude the fallopian tubes [1]. The migration of Filshie clips have been well documented, with multiple case reports documenting migration into the bladder, bowel, rectum, vagina and abdominal wall [2-4]. We describe what we believe to be the first reported case of a fully migrated Filshie clip, approximately 40 years post insertion, into the bladder presenting with gross haematuria secondary to a bladder calculus.

Case presentation

A 73 year old lady presented with painless gross haematuria with no other associated symptoms. A CT Urogram performed revealed a right posterolateral bladder diverticulum with a 2.1 x 1.4 cm calculus within and no other urinary tract abnormality. A

flexible cystoscopy performed confirmed the right posterolateral diverticulum and bladder calculus. Her past medical history included a previous cerebrovascular accident (CVA), hypertension and a previous tubal ligation approximately 40 years ago.



Figure 1: CT KUB showing right posterolateral wall diverticulum with bladder stone in situ.

She subsequently underwent a rigid cystoscopy and cystolithotripsy. Intra-operatively, during laser cystolithotripsy, a metal clip was seen at the core of stone. After completion of cystolithotripsy, the metal clip was easily removed with a grasper. The wall of the bladder diverticulum was inspected and appeared normal and intact. The patient recovered well post-operatively and was discharged the next day.

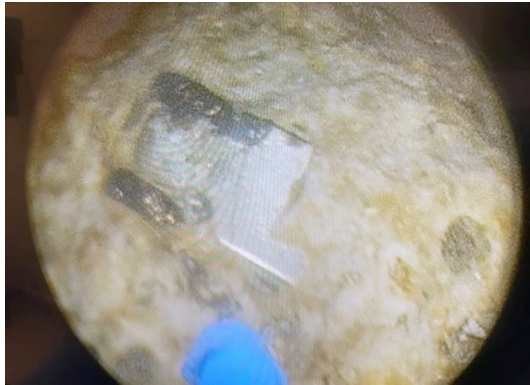


Figure 2: Intra-operative laser cystolithotripsy showing bladder stone with Filshie clip at the core.

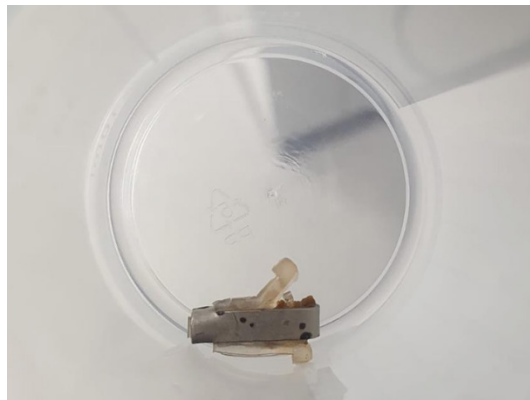


Figure 3: Extracted filshie clip from the bladder.

Discussion

Tubal ligation utilizing Filshie clips is a common method of contraception for women and has been in use since 1981 [5]. The exact mechanism of tubal clip ligation is still unknown; it was previously estimated by Filshie that migration of clips might occur in 25% of patients [6]. It has been hypothesized that the Filshie clip, inert in nature, induces a low-grade inflammatory response around the peritoneum which results in adhesion formation and subsequent erosion into adjacent structure [2,7]. From the

published reports, the symptoms resulting from a migrated Filshie clip may present as early as 6 weeks or as late up to 21 years after insertion [4]. Our case is unique as the patient presented approximately 40 years post tubal ligation. The patient remained asymptomatic from the migration of her Filshie clip and her first incidence of gross hematuria led her to seek medical attention. The incidence of bladder stones in women are commonly associated with foreign bodies such as meshes, synthetic tapes and sutures [8]. The preferred method for management of these bladder stones is cystolithotripsy. In our case, the Filshie clip had completely migrated into the bladder and was not adherent to the bladder mucosa, as such, no excision of bladder mucosa was required.

Conclusion

Filshie clip migration is a rare occurrence. There are multiple case reports describing the migration of Filshie clips. This case adds to the existing growing literature as a potential rare late complication of migrated Filshie clips. It raises awareness that patients with previous tubal ligation may present with complications as late as 40 years post-insertion. Women undergoing tubal ligation procedures should be counselled on the potential risk of late complications.

References

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