Filshie Clips Retrieved From A Femoral Hernia

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SUMMARY: A case of unusual foreign bodies retrieved from a symptomatic femoral hernia is presented and the literature reviewed.

Introduction

One of the commonest methods of female sterilisation in this country is laparoscopic application of Filshie clips across the Fallopian tube on both sides. On occasions these clips become free but usually remain asymptotically within the peritoneal cavity, however they do rarely come to the attention of clinicians, and we report such a case and discuss briefly the limited literature on the subject.

Case Report

The patient was a 35 year old woman, who presented to her GP with a three day history of a lump in her right groin. She was referred to the general surgical clinic where she was seen one week after the lump first appeared. It had come on spontaneously and was not overtly painful although it was slightly uncomfortable. She had no urinary or gastrointestinal symptoms associated with it and was otherwise completely well. She had had nothing like this in the past and the left hand side was normal. There was no history of recent foreign travel. Previously she had had an unsuccessful laparoscopic sterilisation performed in 1993 and subsequently redone after the birth of her daughter in early 1994.

On examination she was found to have a smooth swelling approximately 5cm in diameter below her right inguinal ligament that gave the appearance of a femoral hernia. It was however somewhat fluctuant and was aspirated by the consultant whereupon 20 mls of straw coloured fluid were easily withdrawn and the swelling disappeared. This fluid was compared to a sample of the patient's urine in clinic and noted to be different. She was brought in the following week for exploration of her right groin.

At operation, a femoral hernia was found. The hernial sac was opened as a hard object was palpated within it. Lying free within the sac was a small metallic object

Fig 1. Pelvic X-ray showing only two left sided Filshie clips.

readily identified as a closed Filshie clip. Further gentle exploration of the sac yielded a further two closed Filshie clips. The sac was closed and a routine femoral hernia repair carried out. She made an uneventful recovery.

Postoperatively we discussed our findings with the patient, who disclosed that the first sterilisation procedure, had failed because one clip had been correctly applied across the right fallopian tube but the left hand clip had been applied to the left ovarian ligament. The subsequent procedure carried out at a different hospital, placed two clips on the left tube and a further clip on the right tube for security. Liability for the initial failed procedure had already been admitted by the first hospital and a settlement was being negotiated.

Pelvic X-ray examination (Fig 1) revealed only two clips within the pelvis both lying on the left side. The patient was informed of the possibility of her still remaining fertile and was referred to a consultant

gynaecologist locally before her discharge from our care. A subsequent hystero-salpingogram showed both tubes to be satisfactorily occluded and sterility maintained.

Discussion

Filshie clips are 12.7mm long and 4mm wide with jaws of titanium lined by silicone rubber (1). They are applied laparoscopically, or through a minilaparotomy across the Fallopian tube occluding the lumen of each tube. The silicon rubber maintaining the occlusion of the tube by continued external pressure. The usual course of events is for avascular necrosis to occur at the site of the clip and for the two ends of the tube to separate but for the clips to remain adherent to the tubal remnant. Although it is uncommon, it is not unique for the clips to fall off the ends of the tubes, but very often as the ends have separated and avascular necrosis taken place, sterility is usually maintained.

It is not unknown for these clips to migrate, and they often cross tissue planes over a period of several years and have been reported as being a cause of haematuria after passage per urethra (2) with mucosal ulceration in the dome of the bladder. In addition they may cause morbidity as a nidus for infection both within the pelvis lying close to, but detached from, its original site (3) or after some degree of migration, in inguinal abscess (4).

It is unlikely that the Filshie clips were the cause of the

femoral hernia in this case but we would assume that gravity had a large part to play in them finding their way into the hernial sac as a femoral hernia, when present, is the most dependent part of the peritoneal cavity when in the normal erect position. In this lady's case, as the clips must have been applied by at least two surgeons it is difficult to see how any intraoperative problems or deficiencies of operative technique could be blamed for the clips becoming free but it is highly unusual for three clips to become loose, and to the best of our knowledge no-one has reported multiple free clips in a hernial sac as occurred in this case.

REFERENCES

1. FILSHIE GM, CASEY D, POGMORE JR, *et al.* The titanium/silicon rubber clip for female sterilisation. *Br J Obstet Gynaecol* 1981; **88**: 655-662.
2. KESBY GJ, KORDA AR. Migration of a Filshie clip into the urinary bladder seven years after laparoscopic sterilisation. *Br J Obstet Gynaecol* 1997; **104**: 379-382.
3. ROBSON S, KERIN J. Recurrence of pelvic abscess associated with detached Filshie clip. *Aust NZ J Obstet Gynaecol* 1993; **33**: 446-48.
4. SCHEEL-HINCKE JD, BERENDSTEN H. Migrating clips - a complication of laparoscopic sterilisation with Filshie clips. *Ugeskr Laeger* 1994; **156**: 4592-4593.