CASE REPORT

Migrating Filshie clip: an unmentioned complication of female sterilisation

Emmanuel Kalu, Carolyn Croucher, Ramasamy Chandra

Case report
A 35-year-old woman, para 3, was referred to the gynaecology clinic with a history of left iliac fossa pain, deep dyspareunia and dysuria of 1 year’s duration. Her symptoms were gradual in onset but had got progressively worse in the months leading up to presentation. The pain was sharp and non-cyclical. It was worse during intercourse, and radiated to her lower back. There was no previous history of dysmenorrhea or pelvic inflammatory disease. The patient also described a sharp lower abdominal pain that was worse when her bladder was full and during micturition. This pain was different to the left iliac fossa pain, and was relieved when she emptied her bladder.

The patient had undergone an uncomplicated bilateral tubal occlusion using Filshie clips 3 years prior to this presentation.

Pelvic examination was essentially normal except for some moderate tenderness in the left adnexum. A transvaginal ultrasound scan of the pelvis was normal. A high vaginal swab and culture for chlamydia and midstream urine specimen were both negative.

A diagnostic laparoscopy was arranged with a preoperative diagnosis of endometriosis. At laparoscopy both Fallopian tubes were noted to be transected. The tubal stumps on both sides were normal. Both ovaries were normal and freely mobile. There were no pelvic adhesions and no evidence of endometriosis.

A Filshie clip with jaws closed was seen adherent to the peritoneum in the uterovesical pouch. This was removed laparoscopically following blunt dissection to the filmy adhesions around the clip.

A significant peritoneal defect was noted in the broad ligament just lateral to the left uterosacral ligament (Figure 1). Further exploration of this fenestration revealed the second Filshie clip deeply embedded and adherent to the pelvic peritoneum. The clip was found with jaws closed. It was removed from the pelvis using bipolar diathermy. No other potential cause of pelvic pain was found.

The patient was reviewed in the clinic 6 months following retrieval of the Filshie clips and was found to be completely symptom-free.

Discussion
Laparoscopic occlusion of the Fallopian tubes using Filshie clips is a common method of contraception in the developed world.1,2 Filshie clips are 12.7 mm long and 4 mm wide with jaws of titanium lined with silicone rubber. They effect sterilisation by causing avascular necrosis at the site of clip application. The tubes eventually divide leaving two healed and occluded stumps.

There are few complications associated with Filshie clip sterilisation and most are related to the surgery and not to the Filshie clips per se.3 Vague pelvic pain unrelated to menses has been reported in 5% of women following sterilisation using Filshie clips.2

A rare complication associated with Filshie clips is clip migration through tissue planes. This is estimated to occur in approximately 0.6 per 1000 women.1 Clip migration and eventual expulsion through the urethra, vagina, rectum and anterior abdominal wall has been reported.1,4,5 These migration events were reported to have occurred between 10 months to 7 years after application, and the commonest site of migration reported appears to be the bladder.1

In the absence of obvious causes of pelvic pain we attribute our patient’s symptoms to the migrating clips. Relief of the patient’s symptoms following retrieval of the clips further supports this assumption.

The mechanism of migration is not well understood. Controlled studies undertaken in primates have shown that Filshie clips are capable of inducing a foreign body inflammatory response.6 Tissue reaction following the application of Filshie clips is also observed clinically in the situation of adhesion formation around dislodged Filshie clips as in the present case. Cases of ectopic pregnancy following sterilisation, which are thought to be due to formation of either direct tuboperitoneal fistula or tubotubal fistula, provide further proof of tissue reaction. Peritoneal inflammation from a foreign body inflammatory response with subsequent adhesion formation is therefore a possible mechanism for clip migration.

Migration of Filshie clips occurs so rarely that it is seldom discussed when obtaining consent for sterilisation. This long-term complication must, however, be considered when women who have undergone sterilisation present with pelvic pain.

Figure 1 Laparoscopic image of the Filshie clip embedded in the broad ligament. A, Filshie clip; B, peritoneal defect; C, left uterosacral ligament; D, pouch of Douglas

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References


JOURNAL REVIEW: Contraceptive issues and obesity: a review of three recent publications

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Introduction

Obesity is a big problem getting bigger. The prevalence of obesity now exceeds the critical threshold of 15%, as defined by the World Health Organization (WHO), to be described as an epidemic.1 It defines normal weight as a body mass index (BMI) <25.0 kg/m², overweight as 25.0–29.9 kg/m² and obese as a BMI ≥30.0 kg/m².2 In the UK House of Commons Health report on obesity in 2004, it was predicted that obesity would soon overtake smoking as the leading health problem in the UK.3

A pregnancy associated with obesity is at increased risk of most major pregnancy complications. In a large cohort study in the North Thames Region, Sebire et al. found that gestational diabetes, pre-eclampsia, induction of labour, emergency Caesarean section, postpartum haemorrhage, genital tract infection, wound infection, birth weight above the 90th centile and intratertiary fetal death are all significantly more likely to occur in the obese parturient than her normal-weight counterpart.4 Furthermore, it is well known that the incidence of obesity is increasing in pregnancy, with investigations in Scotland and in the USA recently recording increasing BMI in women in early pregnancy over a 10-year period and an up to two-fold increase in the number of obese pregnant women in the same time period.5,6

The ‘2005 American Committee on Obstetrics and Gynecology Obese in Pregnancy’ statement7 stated that one-third of pregnant women in the USA are obese and recognised that these women are at increased risk of complications. The report went on to emphasise the need for obstetricians to provide pre-conception counselling for such women and encourage weight reduction programmes prior to pregnancy.8

Clearly, contraception in obese women is an important area for health professionals and, indeed, health care providers and politicians. Good contraception can give obese women the opportunity to optimise their health prior to pregnancy. It can allow time for the health professional to encourage weight loss and stabilise any other co-morbidities. It is also crucial from a health economic point of view. As a result, there are engaging in high-risk sexual behaviours in young women who may be more likely to report contraceptive non-use.9

In this research article, the same multi-state database was accessed, but from 1999, and information on pregnancy intention, BMI and contraceptive use at the time of conception was analysed. Unintended pregnancy was defined as an ‘unwanted’ or ‘miss-timed’ pregnancy. The BMI data were again self-reported and the method of contraception at the time of conception. The authors conclude that whilst their findings might simply represent clustering of risk-taking behaviours previously described in adolescent health literature, it may reflect a situation where young women with increased BMI are engaging in high-risk sexual behaviours in order to feel better about themselves by demonstrating the ability to attract a partner.

Conclusion

Few anti-obesity interventions including drugs, surgery, diet and behavioural therapies have been shown to be effective in the short term for the treatment of obesity.7 Therefore, obstetricians and gynaecologists need to develop strategies in order to care for women with obesity and related problems in order to maximise health and minimise complications.

Unfortunately, the above studies suggest that obese women may be more likely to report contraceptive non-use.10


This group from Minneapolis analysed weight-related issues and ‘high-risk’ sexual behaviours in a group of college students completing a questionnaire. The questionnaires assessed sexual risk-taking behaviour, BMI, body image and unhealthy weight-modifying behaviours such as inducing vomiting, binge eating, use of laxatives, and so on. The response rate for the respondents, 20% were overweight and 7% obese. Some 42% of female respondents were never or rarely satisfied with their body image and one-third exhibited unhealthy weight control behaviours. There was a positive association, in female students, with high BMI and a history of the 90% of women who use some form of contraception. The other half occur in women who are not using contraception despite an intention not to become pregnant. The women were analysed in two groups: those using and those not using contraception, and within those groups the authors determined which women had unintended pregnancies. Following multivariable logistic regression analysis, the authors found an association between BMI and unintended pregnancy in the group using contraception in overweight and obese women when compared to normal-weight women. Obese women who were non-smokers were more likely to have unintended pregnancies than lighter women who did not smoke. The authors hypothesise that as non-smokers were more likely to be using the combined oral contraceptive pill (COC) than smokers, the obese non-smokers were at greater risk of unintended pregnancy and the COC was more likely to fail due to problems with absorption and increased levels of free oestrogen affecting negative feedback mechanisms. The method of contraception was, however, not determined. Unfortunately the database only included women with live births and so no data were available about BMI, contraception and pregnancy intention in women who underwent induced abortion.

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1 Graf AH, Chukravarti RN, Majumdar S, Mapa MK, Dhall GI. Pathological changes in Fallopian tubes following three different types of contraceptive devices. J Fam Plann Reprod Health Care 2006; 32(3): 189


3 Graf AH, Chukravarti RN, Majumdar S, Mapa MK, Dhall GI. Pathological changes in Fallopian tubes following three different types of contraceptive devices. J Fam Plann Reprod Health Care 2006; 32(3): 189

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