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Previous Chlamydia And Gonorhoea Infection Not Contraindicated In Reversal Of Sterilisation: A Case Report

Y F Fong, S K Hon

ABSTRACT

Reversal of sterilization poses a significant clinical challenge to the surgeon in terms of technical difficulty and patient selection. Thus, this should only be performed after meticulous consideration of both medical and social circumstances. A prior history of Chlamydia with or without gonorhoea infection often compromises fertility, but ironically in our patient, her previous sterilization with Filschie clips might have actually prevented any ascending infection of her fallopian tubes.

Keywords: reversal of sterilization, Chlamydia and gonorrhoea infection, Filshie clip

INTRODUCTION

Reversal of sterilization is no longer an uncommon procedure. It is the most successful tubal microsurgery procedure with successful pregnancy rate of 50 to 60 %. [1,2] Factors that may influence the success rate of tubal reanastomosis include age of the patient, time from sterilization, sterilization technique [3] and tubal length. [4]

Corresponding and first author:
*Dr Yoke Fai Fong * FRANZOG, MRCOG*
Consultant Department of Obstetrics & Gynaecology.
National University Hospital.
Email: obgfyf@nus.edu.sg
No disclaimer

Second author:
Dr Sook Kit Hon MD
Medical Officer/ Resident
Email: kithon01@yahoo.com
No disclaimer

Department of Obstetrics & Gynaecology
National University Hospital
**Department of Obstetrics & Gynaecology*
National University of Singapore
5 Lower Kent Ridge Road
Singapore 119074

Chlamydia and gonorrhoea infections cause up to 10, 25, and 50 % risk of postinfection infertility after each additional episode of infection.[5] Both symptomatic and asymptomatic pelvic inflammatory disease produces indistinguishable permanent injury to the fallopian tubes from loss of ciliary action through patchy fibrosis to overt occlusion. This is probably related to a combination of tubal damage during and after the index episode of pelvic infection.[6]

A search of the MEDLINE using the search terms 'chlamydia infection', 'gonorrhea infection', 'tubal reversal surgery' and various related terms did not reveal any reported cases of. successful tubal reanastomosis following documented Chlamydia and gonorhoea infection.

CASE SUMMARY

A 32 year-old lady requested for tubal reversal surgery after one year of marriage to her third husband. She had tubal sterilization using the Filschie clip six years ago, prior to her second divorce. Her fertility was well proven as she had six full term normal vaginal deliveries from her two previous marriages.

However, she had the problems of poorly controlled diabetes mellitus and hyperlipidaemia for the past four

years and also multiple hospital admissions in past three years for recurrent episodes of urinary tract and chest infections. In addition, she suffered from depression due to various social circumstances, particularly from her inability to conceive with her third husband. This was a cause for frequent domestic quarrels.

Six months before her surgery, she was admitted with fever and abdominal pain. She was clinically stable, but found to be mildly dehydrated and had suprapubic tenderness but with no rebound nor guarding. She also had a deranged blood glucose of 16.0 mmol/L. Pelvic ultrasonography did not reveal any suspicion of a tubo-ovarian abscess. However, the endocervical swabs were positive for gonorrhea and chlamydia using nucleic acid detection by polymerase chain reaction. She was successfully treated with intravenous ceftriaxone, followed by doxycycline. A repeat endocervical sample for gonorrhoea and chlamydia three weeks later was negative. When reviewed in the clinic several months later, she requested sterilization reversal on the grounds that she was on the verge of divorce as she could not conceive.

Decision to proceed with laparosopic tubal reanastomosis was undertaken after careful consideration. Hysterosalphingogram prior to the surgery revealed normal fallopian tubes up to the level of Filshie clips application without any free contrast beyond the occlusion. The uterine cavity was normal in size and configuration.

Intraoperative findings include grossly normal tubes with bilateral Filshie clips in situ. The uterus was normal. There was no evidence of pelvic adhesions nor any Fitz-Hugh Curtis adhesions in the perihepatic area. The tubes were infiltrated with diluted adrenaline and the segments of the occluded tube with the Filshie clips were excised. Dye hydrotubation was done and the tubal lumen was identified. The tubal ends were approximated and reanastomosed with PDS 6/0 sutures at the 6 and 12 o'clock positions in the muscularis layer of the tube and at 6, 9 and 12 o'clock positions in the serosa layer using PDS 5/0. Dye hydrotubation was repeated. There was intermittent passage of dye from fimbrial end of the right tube but no passage through left tube.

Two months after the surgery, she had her first pregnancy. An ultrasound confirmed an intrauterine pregnancy. She went on to have a normal vaginal delivery in August 2005, one year after the tubal reversal surgery. She is now carrying her second post surgery pregnancy and is due to deliver in October 2006.

DISCUSSION

Admittedly, this lady may not be the ideal candidate for reversal of sterilization. The patient's medical status poses a challenge to the success of the reversal surgery.[2] However, she was going into reactive depression again with her inability to conceive and this was also the source of marital discord, with pressure from the husband's family to seek a divorce from her.

We proceeded with the surgery with the caveat that the procedure will be abandoned if the tubes were found not suitable for reanastomosis. We were surprised by the pristine state of the pelvis. Both chlamydia and gonorrhoea infection are associated with a high risk of occult tubal damage[(5)], not to mention adhesions, fibrosis, scarring and obstruction.[6]

In this instance, we think it is likely that the Filschie clip application had actually helped to stop any ascending infection of Chlamydia and gonorrhea into the peritoneal cavity, leaving the tubes, ovaries and the pelvis untainted. We were also equally surprised with the ease with which she got pregnant following the reversal, and consolidated our belief that the tubes had not suffered any microscopic ciliary or mucosal damage.

Reversal of sterilization has the advantage of higher overall success rate than IVF and therefore, more cost-effective.[7] Patients who have had sterilization seeking a subsequent pregnancy should have this option discussed. Patient selection for reversal is of utmost importance to reap the maximum benefit for the patient. A prior history of chamydia and gonorrhea infection is not necessary a contraindication to surgery.

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