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Case Report

A successful pregnancy outcome: post bilateral salphingo-oophorectomy

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ABSTRACT

A 30 year old nulliparous woman, married for 7 years presented with complaints of lower abdominal pain since a year. Her menstrual history has been regular, associated with dysmenorrhea. She gave a past surgical history of right ovarian cystectomy in view of chocolate cyst noted on diagnostic laparoscopy. Investigations revealed a bilateral complex ovarian cyst and an elevated Ca-125 of 100 units/ml, proceeded with bilateral salphingo-oophorectomy as grade IV endometrioma of both ovaries with frozen pelvis noted. Later, she resumed her menstrual cycles with exogenous estrogen and progesterone. She conceived following a donor oocyte frozen embryo transfer and she delivered a healthy 2.74 kg girl baby with a good Apgar score.

Keywords: Endometriosis, Infertility; IVF

INTRODUCTION

Endometriosis is a debilitating condition, characterised by endometrial like tissue outside the uterine cavity, which affects up to 10% of reproductive age group women and up to 50% of women with infertility.¹ There is a reduction in a woman's fecundity from 0.07 to 0.2 per month to 0.02 to 0.1 per month.² The definitive cause still remains unknown, yet the theory of retrograde menstruation proposed by Dr. John Sampson-the father of endometriosis is most accepted. Being an estrogen dependent disorder, endometriosis present with chronic pelvic pain, dysmenorrhea, deep dyspareunia and associated infertility. The principal goal of treatment includes relief of symptoms, resolution of endometriotic implants, prevention of recurrence and thus improve the quality of life.³

We reported a case of severe stage IV bilateral endometrioma associated with primary infertility which necessitated a surgical removal of bilateral tubes and

ovaries who had a successful pregnancy outcome following a donor oocyte frozen embryo transfer.

CASE REPORT

A 30 year old nulliparous woman presented with complaints of lower abdominal pain since one year. Her menstrual cycles were regular and associated with dysmenorrhea. Her marital life was 7 years and she was anxious to conceive. She gave a history of coitus which was 2-3 times a week associated with dyspareunia. She was a known case of hypothyroidism on regular treatment. As a part of her infertility work up done elsewhere; she had a diagnostic laparoscopy, right cystectomy done as chocolate cyst was noted following which IVF was done and number oocytes were very few and there were no embryos to transfer.

Her general physical and systemic examination was unremarkable.

On per abdomen examination, a non-tender mass of 14 weeks size felt occupying both the iliac quadrants and the hypo gastric quadrant. Per vaginal examination also revealed a mass of 16 weeks size along with fullness in the lateral fornices.

Investigations

Ultrasonography of abdomen and pelvis showed uterus of size 9.5×5 cm and features suggestive of adenomyosis and bilateral complex ovarian cysts of size 8×6.3 cm on right side and 6×4 cm on left side.

Ca-125 was elevated: 100 units/ml.

Pre-operative work up was done, which was normal.

Treatment

Patient was explained about the need for frozen section to rule out malignancy and a uterine conservative surgery if the reports turn out to benign. Intraoperatively dense pelvic adhesions between the sigmoid colon and the left ovary and the fallopian tube noted suggestive of a frozen pelvis. Adhesiolysis done and deeply infiltrated endometriomas; 8×10 cm right endometriotic cyst and 6×8 cm left endometriotic cyst noted. Hence proceeded with bilateral salphingo-oophorectomy and endometrial curettage. Histopathological examination revealed endometriotic cyst of the ovaries and a mid-secretory pattern endometrium. Post procedure she was given tibilone 2.5 mg once daily for 6 months and GnRH analogs for 3 months.

Outcome and follow up

The patient returned to us after 5 years for fertility management. She had her baseline investigations done which were within normal limits. She was planned for donor oocyte programme and endometrial preparation was resumed with estradiol valerate.

TVS pelvis scan showed a uterus measuring 8.2×5 cm with an endometrial thickness of 9.8 mm. Multiple small intramural and subserosal fibroids were noted (largest measuring 1.4×1.6 cm) and ovaries were not visualised (post op status).

Serum estradiol was done: 402 pg/ml.

After optimising the endometrium, donor oocyte frozen embryo transfer was done. Her pregnancy was confirmed with a β-hCG value of 1858 Miu/ml and single viable intra uterine pregnancy was confirmed 2 weeks later. Her first trimester was uneventful. She required a USG indicated cervical encrclage at 26 weeks. She underwent an emergency lower segment caesarean section as she presented in preterm labor with breech presentation at 35 +5 weeks of gestation. Intra operatively, dense adhesions

noted between the abdominal wall and the uterus and bladder was drawn up, adhesions were released by sharp dissection. She delivered a healthy 2.74 kg female baby with a good Apgar score of 8/10, 9/10. She had uneventful post-natal period with established lactation and got discharged on post-operative day 3.

DISCUSSION

Endometriosis is a chronic debilitating condition which may impair fertility.⁴ However, mechanism of endometriosis causing infertility remains uncertain and may be likely depend on the stage of the disease.⁵ The American Society of Reproductive Medicine has surgically staged the endometriosis into 4 stages: minimal, mild, moderate and severe stages. The spectrum of endometriosis ranges from the presence of minimal ectopic tissue to inflammation, severe pelvic anatomic distortion and pelvic adhesions.⁶ The pelvic adhesions and the distorted pelvic anatomy can impair the oocyte release or pick-up, sperm motility hence impair the fertilization process.⁶ Advanced endometriosis may impact the ovarian folliculogenesis and quality of oocytes.⁷

Endometriosis can managed be both medically and surgically. The most appropriate treatment for endometriosis associated with infertility still remains a matter of discussion and debate.⁸ Many women seek treatment of the disease for pain and desire fertility in the future.⁹ The surgical excision of severe endometriosis has shown to positively affect the chance of natural or assisted pregnancy postoperatively.²

A literature search on pregnancy outcome following bilateral oophorectomy revealed a case report, where the patient was diagnosed with pseudo myxoma peritonei. She was offered embryo cryopreservation followed by IVF post-surgery and the patient delivered without any complications.¹⁰

In a retrospective study conducted at Brazil, a total of 66 women with primary infertility who had previously undergone ovarian surgery for endometriosis stage III/IV were studied. It was observed that these women had fewer follicles and oocytes in comparison with control group.⁸

The literature supports oocyte cryopreservation, our lady with inadequate oocyte reserve and frozen pelvis; salphingo-oophorectomy was the best option in providing a relief from her symptoms and successful achievable pregnancy with a donor egg FET.

CONCLUSION

This is a classic case of stage IV severe endometriosis with chronic pelvic pain and associated infertility. So this option of a bilateral salphingo-oophorectomy for such patients with deep infiltrating endometriosis and frozen pelvis gives them a good quality of life. With donor egg frozen embryo transfer patients following bilateral

salphingo-oophorectomy in cases of severe endometriosis, the patients can achieve a successful live birth.

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