

Case Report: The Influence of Endometrial Suturing on the Risk of Subsequent Infertility

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INTRODUCTION

There are global rise in the rate of Caesarean sections (CS) during the last 25 years has coincided with an increase in the number of couples seeking help for secondary infertility.[1,2]

There have been attempts to examine the link between these two conditions, and available data confirm an association between CS and infertility. The relationship is complex, however, involving more than a simple patho-physiological association. There may be a voluntary component to the causal relationship between CS and infertility, which is best explored using qualitative methods. We argue that CS does cause infertility, but the mechanism could be social/psychological rather than pathological.

CS was associated with a 15% lesser chance of conception than vaginal birth during 3 years of subsequent follow-up, whether or not women were trying to conceive.[3]

A number of authors have speculated about the mechanism by which CS can lead to infertility and attribute subfertility following CS to pelvic adhesions, infection or placental bed disruption.[4] The aim of this study was to emphasize the importance of not including the endometrium when we stitched the myometrium at CS .

PATIENTS AND METHOD

We conducted this case report study on consecutive two patients seeking fertility advice at a tertiary specialized Tiba fertility clinic. Both patients signed a full informed consent before being enrolled in the study. The ethical committee board at the Babylon health directorate approved the research plan. Physical examination and necessary investigations including hormonal analysis, abdominal and vaginal ultrasonography, and hysteroscopy were done for both cases. Two cases were diagnosed with multiple remnants of sutures material inside uterine cavity.

Intervention were done and followed until conception and delivery were completed.

CASE 1

36 years old patient p1A2 with history of CS & myomectomy , referred to our center as case of 2nd infertility with suspicion of foreign body in side uterine cavity investigations was normal regarding hormonal analysis :

FSH 6.1

LH 3.7

PROLACTIN 15.1

TSH

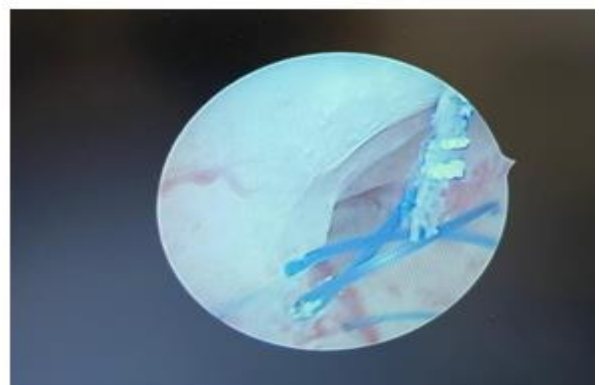
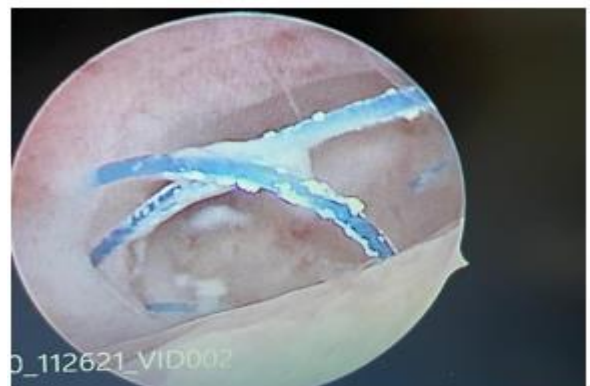
AMH 2.6

U/S Show white shadow inside the uterine cavity.

Hysteroscopy was done for her which show multiple threads of sutures inside the cavity.

Intervention was done for her and removal of the thread was performed.

The patient was followed and conceived 6 months after operation of the removal of the threads and delivered inevitably.



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CASE 2

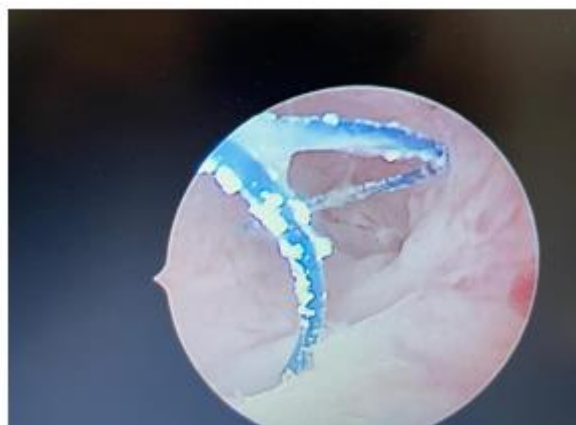
32 years old patient, P2 A0 with history of 2 CS , complaining of 2nd infertility for 7years with previous trail of failed IVF cycle.

FSH6.4 LH2.8 TSH2.1 AMH2.3

PROLACTIN 14.3

All investigations were normal except hysteroscopy which show multiple remnants of sutures material inside uterus cavity.

Intervention was done for her and removal of the thread was performed. The patient was followed and successful conception occurred 4 months after operation of the removal of the threads and delivered inevitably.



DISCUSSION

Various studies have reported that delivery by Caesarean section is associated with fewer subsequent pregnancies and longer inter-pregnancy intervals.[5_7]

In a study Including a cohort of 2423 women suggested that women who deliver their first child by cesarean delivery may be less likely to conceive a second child in the 3 years following first delivery than women who deliver their first child vaginally.[3]

There is a growing body of evidence that suggests that the surgical technique for uterine closure following Cesarean

delivery influences the healing of the Cesarean scar, but there is still no consensus on the optimal technique.

The reason for the lower likelihood of pregnancy after a C-section is not known, but the scarring of the inside of the uterus during the procedure and ensuing low-grade infection may be factors.

The presence of multiple remnants of sutures material inside the internal cavity of uterus and presented with secondary infertility, this may be lead to formation of a small pockets on the scar on the inside of the uterus which may act as a reservoir, retaining menstrual blood from each cycle and remaining constantly inflamed.

We don't know how much – these threads can damage sperm and interfere with embryo implantation, leaving them infertile or struggling to get pregnant. Further, those women will have symptoms of abnormal bleeding and spotting between periods, ongoing pain, very painful periods or pain during sex.

CONCLUSION

Technique of uterus suturing and involving of endometrium with myometrium during CS may lead to secondary infertility.

We emphasize the importance of not including the endometrium when we stitched the myometrium at CS .

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