

*Case Report*

# Pregnancy following endometrial ablation resulting in subtotal hysterectomy under spinal anaesthesia – A case report

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**A 44-year-old woman presented in her second pregnancy following a cavaterm balloon endometrial ablation three years earlier. Antenatal scans showed a fibroid measuring 11 × 7.5 × 8.2 cm in the lower segment. The placenta was fundal positioned and the baby's growth was normal. At 32 weeks, a magnetic resonance imaging (MRI) scan excluded placenta percreta but was unable to exclude placenta accreta. At 37 weeks, she was in labour with a transverse presentation. The baby was born with good apgars and weighed 2970 g. The fibroid was removed. She recovered well and histology described a leiomyoma and myometrial hyperplasia. There was no evidence of placenta accreta.**

**Key words:** Pregnancy, endometrial ablation, antenatal scans, fibroid.

## INTRODUCTION

Pregnancy following endometrial ablation is uncommon, with an estimated rate of 0.65 (Roy and Mattox, 2002) to 0.68% (Pugh et al., 2007). The risk of complication is very high with 13% estimated to have a normal pregnancy (Hare and Olah, 2005). This case report demonstrates a rare case of full term pregnancy after a second generation cavaterm endometrial ablation.

## CASE REPORT

A 44-year-old woman presented in her second pregnancy following a cavaterm balloon endometrial ablation three years earlier. Antenatal scans showed a fibroid measuring 11 × 7.5 × 8.2 cm in the lower segment. The placenta was fundal positioned and the baby's growth was normal. At 32 weeks, a magnetic resonance imaging (MRI) scan excluded placenta percreta but was unable to exclude placenta accreta. At 37 weeks, she was in labour with a transverse presentation. A caesarean section was performed under spinal anaesthesia. Spinal was chosen as patient strongly requested to be awake during the procedure and spinal was chosen ahead of an epidural anaesthetic due to the faster effectiveness needed as patient was at risk of cord prolapse. The use of general

anaesthetics was also explained if the procedure did not go well. The baby was born with good apgars and weighed 2970 g. The fibroid was positioned anteriorly in the lower segment. This caused difficulty with uterine closure, so a myomectomy was performed.

The placenta was adherent to the right ostia. It was removed with difficulty and bleeding persisted from both the fibroid and placental bed. Despite sutures to the fibroid bed and the use of ergometrine, syntocinon and carboprost, haemostasis could not be achieved. Given the patient's age and completion of her family, both B lynch suture or Bakri balloon were not considered. With the patient's verbal consent, a subtotal hysterectomy was performed. She remained awake and pain free throughout the procedure, requiring 6 units of blood and and free frozen plasma after 6 litre blood loss. She recovered well and histology described a leiomyoma and myometrial hyperplasia. There was no evidence of placenta accreta.

## DISCUSSION

This is one of the first reported cases of a full term pregnancy post endometrial ablation using the cavaterm thermal balloon technique. Previously reported

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pregnancy post cavaterm ablation resulted in an ectopic pregnancy (Gandhi and Habiba, 2005). Most other reported pregnancies have followed first generation techniques, which is transcervical resection of the endometrium (TCRE) or roller ball ablation. This case suggests that pregnancy can follow endometrial ablation by any method. It is also the only known reported case of peripartum hysterectomy performed entirely with spinal anaesthesia.

The risk of peri-partum hysterectomy in post endometrial ablation pregnancies was always expected. In this case, it was further increased by the presence of the anterior wall fibroid. Myomectomy during caesarean section is a controversial topic. Theoretically, caesarean section represents an ideal time for myomectomy. Postpartum contraction of muscle fibres and blood vessels can limit blood loss whilst vascular changes and clot formation in the placental bed also aids haemostasis. Two retrospective studies of myomectomy during caesarean section reported no difference in blood loss compared to caesarean section alone (Ashley et al., 2004; Hassiakos et al., 2006).

## Conclusion

Endometrial ablations are replacing hysterectomies as treatment of menorrhagia. Unless these patients are given adequate contraception or sterilised at the time of the procedure, we expect to see more cases of post ablation pregnancy and its associated morbidity in the future.

## REFERENCES

- Ashley S, Roman Khalil MA (2004). Myomectomy at time of Caesarean delivery: A retrospective study. *BMC Pregnancy Childbirth* 4(1):14.
- Gandhi SV, Habiba MA (2005). Ectopic Pregnancy present as haematometra following Cavaterm ballon endometrial ablation. *J. Obstet. Gynaecol.* 25(6):614-5.
- Hare AA, Olah KS (2005). Pregnancy following endometrial ablation: a review article. *J. Obstet. Gynaecol.* 25(2):108-114.
- Hassiakos D, Christopoulos P, Vitoratos E, Xarchoulakou G, Vaggos K, Papadias K (2006). Mymectomy during Cesarean Section: A safe procedure? *Ann. N. Y. Acad. Sci.* 1092:408-13.
- Pugh CP, Crane JM, Hogan TG (2007). Successful intrauterine pregnancy after endometrial ablation. *J. Am. Assoc. Gynaecol. Laparosc.* 7(3):391-4.
- Roy KH, Mattox JH (2002). Advances in endometrial ablation. *Obstet. Gynaecol. Surv.* 57(12): 789-802.