

Flexible hysteroscopic exploration in surgical termination of pregnancy in a patient with uterine abnormality

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Abstract Congenital uterine anomalies may cause various reproductive problems, including difficulty performing vaginal surgical termination of pregnancy (TOP). We report the case of a 35-year-old woman with a uterus bicornis bicollis (a double, partially fused uterus with two cervixes and a vaginal septum), who was requesting termination of pregnancy following two failed attempts at vacuum aspiration. Flexible hysteroscopy, in combination with trans-abdominal ultrasound, was used to facilitate the correct passage of the dilators during a successful dilatation and evacuation (D&E) followed by insertion of intra-uterine progestogen-only contraceptive system ('Mirena'). On review of the literature, we found no similar cases reported.

Keywords Hysteroscopy · Flexible hysteroscopy · Pregnancy termination · Uterine anomalies

Case history

A 35-year-old woman of Asian origin presented to the District Pregnancy Advisory Clinic at 15 weeks gestation. She had not been using contraception. She had had two failed attempts at vacuum aspiration at another hospital. The first attempt, at 11 weeks and 5 days gestation, had been preceded by cervical ripening using the prostaglandin analogue, misoprostol, and the second at 11 weeks and 6 days gestation, by using the antiprogestogen, mifepristone, followed 24 hours later by vaginal misoprostol. There

had been difficulty dilating the cervix in both procedures, and concern that a false passage may have been created during the second procedure.

The patient had been diagnosed with a congenital uterine anomaly in the United Kingdom in 1983 at the age of 13 years. She had presented as an emergency admission to a London hospital with acute abdominal pain and an abdominal mass arising from the pelvis, with a previous history of regular, painful menses.

At that time, she was initially thought to have a bicornuate uterus with unilateral haematocolpos. Following further investigation she was found to have two uteri, two cervixes, a vaginal septum and an absent right kidney. Over a three month period she underwent two haematocolpos drainage operations and a division of the vaginal septum.

At the age of 27 years, a laparoscopy and dye test performed for dysmenorrhoea in Mumbai, India, showed a right-sided hydrosalpinx with no patency. The left tube was normal and patent. The right hydrosalpinx was apparently not treated.

The patient had then undergone a successful vacuum aspiration in Delhi at the age of 30 years for an unplanned pregnancy in the left uterine horn at 7 weeks gestation.

At the time of the current presentation for termination of pregnancy (TOP), the patient stated that she did not wish to have any children. As this was her second, unplanned and unwanted pregnancy, she was requesting sterilization. Pelvic ultrasound scan confirmed the pregnancy to be in the left uterine horn.

She was given a dose of mifepristone, 200 mg, 48 hours prior to surgery and misoprostol, 400 mcg vaginally, two hours preoperatively in order to ripen the cervix. She was now 15 weeks gestation. She then underwent a hysteroscopic exploration of the cervical canal, without further dilatation, using a 2.8 mm flexible hysteroscope, under

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general anaesthesia. The tortuous cervical canal was navigated with the hysteroscope until the fetal membranes were visualized. Hydrodissection of the membranes off the uterus was seen. The position of the hysteroscope was confirmed using trans-abdominal ultrasound. Once the direction of the cervical canal had been demonstrated by ultrasound it was possible to pass the dilators confidently, monitored by ultrasound. The cervix was then dilated to 16 mm using Ambler Hawkins dilators and the uterine contents were evacuated using Sopers forceps and vacuum curettage. Following the evacuation an intra-uterine progestogen-only system (IUS) was inserted into the left uterus under ultrasound guidance. Previous investigation had demonstrated that the right tube was not patent. Post operatively she was given antibiotic prophylaxis with 1 gm rectal metronidazole and 1 gm oral azithromycin.

The patient was discharged home later the same day with a plan for follow-up to check the IUS threads.

Discussion

Medical termination of pregnancy was not attempted because of the uncertainty about the formation of a false passage during an earlier procedure, and it was felt safer to explore the cervical canal hysteroscopically before dilating the cervix.

It is difficult to explain why the previous termination in Delhi 5 years earlier had apparently been without difficulty, when on this occasion it had posed such a problem.

Flexible hysteroscopy is accepted as a reliable tool in the investigation of abnormal uterine bleeding [1]. Congenital uterine abnormalities have been described as a cause of failed surgical TOP [2–4]. The routine use of continuous ultrasound guidance in apparently uncomplicated surgical TOP has been shown to reduce complication rates [5], but this is not widely accepted practice. Pre-operative transvaginal sonography has been suggested as a useful investigation, following a failed surgical TOP in a patient

with a uterine abnormality who went on to have a successful medical TOP [2].

The use of flexible hysteroscopy to define and canalize the cervical canal at the time of TOP has not been described previously. In this case, flexible hysteroscopy was used to correctly identify the cervical canal, and in combination with trans-abdominal ultrasonography, to aid dilatation of the cervix during TOP. The flexible rather than rigid hysteroscope was chosen in this situation. Although the diameters of the two instruments are similar, the flexible scope was felt to offer easier navigation of the tortuous cervical canal. It was considered to carry less chance of trauma through false passage formation or perforation of the pregnant uterus than a rigid hysteroscope.

This case report confirms the value of the flexible hysteroscope in managing failed TOP where there is an anatomical abnormality of the genital tract. Its use was particularly valuable in this case where difficulties had been encountered by an experienced consultant, and there were concerns that previous procedures had caused a false passage.

(Declaration: The management of the patient in this case report complied with laws in the United Kingdom.)

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