China, particularly before 1993, may well have a device that is virtually impossible to remove using standard techniques. This case was an extreme example of the difficulties that can be associated with IUD removal, accompanied by a very successful outcome for the patient.

### Statements on funding and competing interests

Funding. None identified.

Competing interests. None identified.

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# CASE REPORT

# Failed medical termination of pregnancy associated with implantation in a non-communicating uterine horn

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Journal of Family Planning and Reproductive Health Care 2004; 30(3): 178

A failed medical termination of pregnancy at 16 weeks' gestation proved to be due to a uterine malformation. Delay in diagnosis resulted in uterine rupture and the need for an emergency laparotomy. Recommendations are made for earlier diagnosis.

# Case report

A 17-year-old primigravida presented to the family planning clinic requesting a termination of pregnancy (TOP). She was unsure of the date of her last menstrual period. On examination she had a 16 weeks' gestation size uterus and a transabdominal ultrasound scan detected a viable intrauterine pregnancy with fetal measurements compatible with a gestation of 16 weeks.

After appropriate counselling the patient received 200 mg mifepristone orally followed 48 hours later by 2.4 mg misoprostol vaginally in divided doses. 1 She experienced minimal vaginal bleeding and did not pass any products of conception. A further course of misoprostol and 1 mg gemeprost over the course of 72 hours failed to expel products of conception. A uterine anomaly was considered but two transvaginal ultrasound scans (TVS) repeated after each course of treatment suggested a normal uterus and an intrauterine pregnancy. A further TVS, however, performed with a size 6 Karman cannula inserted into the cervix, demonstrated a bicornuate uterus with the pregnancy in a blind horn, not in communication with the cervix. Before a hysterotomy could be performed the patient collapsed with signs of hypovolaemia and peritonism. At emergency laparotomy she was found to have a pregnancy in a ruptured blind horn of a bicornuate uterus with a haemoperitoneum. The horn and redundant tube were excised. A blood transfusion was not required and the patient made an uneventful recovery.

## Discussion

Approximately 4% of fertile women have some form of congenital uterine anomaly due to abnormal fusion of the Müllerian ducts, the most common of which is a bicornuate uterus. 1 It has been estimated that known congenital uterine anomalies result in a 90-fold increase in the risk of failed surgical TOP when compared to normal uterine anatomy.<sup>3</sup> Medical TOP using methotrexate and misoprostol has been successful when surgical TOP has failed in women with congenital anomalies, but the reported cases were of less than 8 weeks' gestation. 4 The exact nature of the anomaly is important as medical treatment will inevitably fail if an advanced pregnancy is in a blind horn.

Ultrasound scanning is the first line of investigation when TOP fails. Even when a diagnosis of uterine anomaly is suspected, simple TVS may fail to detect an anomaly as in this case. Inserting an echogenic instrument into the cervix prior to the ultrasound investigation allowed clear demarcation of the uterine cavity in communication with the cervical os. Only with this manoeuvre was it possible to demonstrate that the pregnancy was in a non-communicating horn of the uterus. Magnetic resonance imaging may be an alternative modality<sup>5</sup> but the technique described with ultrasound is simple and readily available in all gynaecology departments.

When surgical or medical TOP fails a congenital abnormality of the uterus should always be considered. The unfortunate events in this case cumulating in an emergency laparotomy emphasise the importance of early, appropriate investigation when repeated attempts at TOP fail.

### Statements on funding and competing interests

Funding. None identified.

Competing interests. None identified.

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