Perforation of the anterior cervix by the threads of an intrauterine device

We would like to share with the readers an interesting case of a cervical perforation by the threads of an intrauterine device (IUD). Our patient was a multiparous woman in her 40s who attended for removal of her IUD due to dysmenorrhoea, having had a TT380-Slimline inserted by her general practitioner 5 years previously. She denied any post-coital bleeding or dyspareunia and was otherwise well with no history of gynaecological procedures, abnormal smears or pelvic infections. On examination, the threads of the IUD were protruding from the anterior lip of her cervix, approximately 10 mm of the external cervical os at the 1 o’clock position (figure 1).

We were concerned that the frame of the IUD might have perforated the uterus or the cervix. We therefore performed an ultrasound scan which revealed a correctly placed IUD within an anatomically normal uterus. We dilated the cervix to size 6 Hagar, during which time the threads were noted to begin to retract into the cervical tissue. We then inserted Spencer-Wells forceps into the cervical os and grasped the caudal end of the IUD. The IUD was removed under ultrasound guidance uneventfully with minimal bleeding. During the removal, the threads retracted fully into the cervical tissue. On removal, the IUD was noted to be intact.

Despite widespread use of IUDs, we only found six previously published reports of IUD threads perforating the cervix. The first of these, in 1978, involved a plastic Lipps loop, and the following cases involved three levonorgestrel intrauterine systems and two brands of copper IUDs. All IUDs had been in situ for >12 months. In all cases, the threads were reported to be protruding between the 12 and 3 o’clock positions, within 10 mm of the external cervical os. No cases documented a history of cervical trauma at the time of IUD insertion or any significant symptoms at the time of removal. One IUD had been fitted immediately following a surgical abortion; the others fitted routinely in community clinics. All IUDs were correctly sited and no anatomical abnormalities were documented. Reassuringly, removal was straightforward in all cases, with most clinicians inserting a thread retriever into the cervical canal to retrieve the threads before removal. In all cases, the threads retracted completely into the cervical canal at time of removal.

In a case report from 1980, it was hypothesised that the IUD threads may have a ‘curved memory’, naturally returning to the position they held within the insertor, resulting in perforation of the cervix. This is not a feature of modern IUD threads, and given that the perforation repeatedly occurs on the anterior lip, there have been postulations that the perforation is related to tenaculum use. It could be that the tenaculum creates a fistula, through which the threads later migrate. Alternatively, a laceration to the cervix from the tenaculum may encase the threads within the cervical tissue as it heals. Similarly, threads could become encased within healing tissue following any type of cervical trauma, procedure or erosion. Retraction of threads into the cervical canal is not uncommon. These retracted threads may be forced into the cervical tissue due to uterine pressure changes during the menstrual cycle.

This was the first time we had seen this presentation, and although some of our colleagues reported similar cases, they were unable to recall their patients’ presentation or management. Therefore, with very few published cases for reference, we hope the readers will find our case and literature summary helpful if they should find themselves presented with a similar scenario. Readers can be reassured that removal of IUDs with similar presentations has been reported to be straightforward.

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