

LAPAROSCOPIC RETRIEVAL OF PERFORATED INTRAUTERINE DEVICE

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ABSTRACT

We present a case of successful laparoscopic retrieval of a perforated intrauterine device (Lippes loop). The Lippes loop was inserted after manual intrauterine adhesiolysis as a treatment of uterine synechia presenting as secondary amenorrhoea of 20 months duration. The uterine perforation in this patient did not occur at the time of insertion but possibly during the attempt at transcervical removal of the missing IUD by manipulation with the retrieval hook. Double puncture laparoscopic technique under ketamine general anaesthesia was performed to remove the IUD without complication and patient went home the same day.

Key Words: Laparoscopy, Missing Intrauterine Device (IUD), Lippes Loop, Uterine Perforation (*Accepted 12 December 2007*)

Case Report.

The patient Mrs. C.O, a 32 year old Para 1⁺² woman presented at Life Specialist Hospital Nnewi with a 20 months history of secondary amenorrhoea. The cessation of menses followed manual removal of placenta under general anaesthesia in her last delivery in another private hospital. She had term spontaneous vaginal delivery of a live male baby about 20 months prior to presentation which was complicated by retained placenta and an early neonatal death. Lactation was suppressed with bromocriptine. Before her last conception she had been treated for amenorrhoea traumatica. Prior to presentation she had received treatment in another hospital where they performed adhesiolysis and insertion of paediatric Foleys catheter followed up with combined oral contraceptive pills for 3 months without success.

Her general examination was satisfactory and no obvious abnormality was detected on abdominal and pelvic examination. Ultrasonography revealed normal sized anteverted uterus. The endometrial cavity could not be delineated. There was dominant follicle (23mm) in the right ovary. HSG showed small uterine cavity with filling defects. The fallopian tubes were not outlined. A diagnosis of uterine synechia was made and patient counselled on the treatment modality.

Intrauterine manual adhesiolysis was performed under general anaesthesia and lippes loop inserted thereafter with the aid of an introducer. She was placed on conjugated oestrogen (Primarin 0.625mg) tablet for 21 days and progestogen (Primolut N 5mg) for 10 days (from day 16 to 25). She received 3

cycles of this treatment without a menstrual flow/response. Ultrasound evaluation revealed an endometrial thickness of 1.6mm and the Lippes loop was still insitu. However she presented 2 weeks later with inability to feel the intrauterine device (IUD) string. A repeat ultrasound showed the Lippes loop was partly embedded in the myometrium. An attempt at retrieval of the IUD using a hook device under general anaesthesia and cervical dilation failed. A follow up ultrasound scan revealed no IUD inside the uterine cavity. Plain abdominal x-ray with a sound in the uterine cavity showed the Lippes loop in the pelvis outside the uterine cavity. The fallopian tubes were normal with bilateral spillage of dye.

Laparoscopic retrieval of IUD under ketamine general anaesthesia¹ was performed using double puncture technique (a 10mm infra umbilical port and a 5mm port to the left). Pneumoperitoneum was achieved with carbondioxide² delivered via a verres needle. The findings at laparoscopy include normal sized uterus with a right posterior fundal perforation and no active bleeding, normal fallopian tubes and clear cul de sac. The Lippes loop was lying free in the pelvis and was picked up at one end with a grasper. The grasper was withdrawn so that the tip of the loop was pulled into the trocar and the trocar together with the grasper was removed. The tip of the loop now exteriorized was picked with artery forceps and pulled out while maintaining vision of the intra-abdominal portion in the process to prevent injury to the intra-abdominal structures. The laparoscope was thereafter withdrawn and the gas released. The port wounds were repaired and dressed. She was placed on antibiotics and analgesics and subsequently discharged home the same day on full recovery from the anaesthesia.

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DISCUSSION

Missing intrauterine device (IUD) occurs in 5-25% of all IUD insertions³. This may result from expulsion, perforation, or pregnancy. The incidence of perforation is 0.87 per 1000 insertions⁴ and occurs mostly during insertion. It constitutes the most dangerous complication of IUD⁵. The uterine perforation in this patient did not occur at the time of insertion but possibly during the manipulation with the retrieval hook. IUD has also been reported to migrate to myometrium, appendix⁶, colon, ovary⁷, ileum,⁸ anus⁹ etc. In the case reported it lay free in the pelvic peritoneum. The common presenting symptoms are inability to feel the thread and unexplained abdominal or pelvic cramps. The diagnosis in this patient was made with a combination of ultrasound and abdominal X-ray with uterine sound insitu. Hysteroscopy, laparoscopy and colonoscopy⁸ are other diagnostic methods.

Accepted method of treatment of perforated IUD is surgical removal because of the risk of adhesion formation, and damage to the intestines or bladder. Conventionally, perforated IUCD was removed by laparotomy in our environment because of non availability of laparoscopy and limited skill in its use. However, laparoscopic retrieval as done in this patient is appropriate and the best option in most cases. It is recommended in cases of perforation where the loop is lying free in the peritoneal cavity or not entangled with a sensitive structure as in this patient. It is diagnostic and therapeutic, safe and acceptable to patients. It obviates the need for laparotomy, decreases the duration of hospital stay, as well as prevents morbidity associated with laparotomy. Our patient went home on the same day and returned to work the next day.

In conclusion, laparoscopy retrieval of perforated IUD is safe and possible in our practice and should be promoted with the increasing availability of laparoscopic centres in the country.

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