PERFORATION OF THE UTERUS

(Report of 5 Cases)

by

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SUMMARY

Perforation of the uterus may present a varied clinical picture depending on the site and size of perforation, and whether any other abdominal viscera are injured. Perhaps, more serious is neglect in its diagnosis. Difficulty in removal of an IUCD demands precise determination of the location of IUCD. Intemporate efforts at removal must be avoided.

Introduction

Perforation of the uterus is a rare but a serious complication of termination of pregnancy and IUCD insertion and (very rarely) removal. In a short period from 2nd August 1983 to 20th Sept. 1983, five cases of perforation of the uterus were dealt with at Safdarjang Hospital, New Delhi. Of these three were following termination of pregnancy and one occurred during IUCD removal. The fifth case coincidentally operated during this period for DUB showed evidence of a silent old perforation of the uterus. All were referred cases.

Remarks

Table I gives the relevant details in the history and Clinical examination of each patient.

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Case 1 and Case 2 have many similar features in the history and Clinical findings. Note that case 1 was earlier dealt by a 'dai' and case 2 by qualified lady doctor, who obviously failed to suspect the perforation, continued the surgical procedure leading to intestinal complications.

Case 3: Here when difficulty at removing the Cu-T was first felt, either the location of the Cu-T should have been investigated; or the patient should have been straightaway referred to a better institution instead of repeating futile attempts at removal.

Case 4: The recovery of the foetus from the bladder was the most unusual feature.

Case 5: Was suggesive of an old silent perforation of the uterus.

Precautions

With the rising incidence of elective abortion and the increasing use of Cu-T, the incidence of perforation of the uterus is bound to increase unless the following

TABLE I

1 S. No. & Name	2 Date	3 Age	4 Gravida/ Para	5 History of Previous Interference	
1. Mrs. K. K.	2-8-83	35 yrs.	G6P5	—2 months Amenorrhea, abdominal pain, vomiting and constipation, M.F.4/28 regular F.H. P.H. } Not relevant	Following termination of pregnancy by an untrained dai.
2. Mrs. S. K.	14-8-83	25 yrs.	G1P0	—2 months Amenorrhea and something protruding per Vaginum. Pt. was an Arts graduate and was married since 3 months. M.F. 4/30 regular	MTP done by—a private lady doctor. Following this complication patient was sent to Safdarjang Hospital.
3. Mrs. P. R.	10-9-83	30 yrs.	G3P2	On 8-9-83, Pt. reported at the PHC with the desire to get CuT removed. Here an unsuccessful attempt was made and the Pt. was then referred to ESI Hospital where a further attempt was made on 9-9-83. On 10-9-83, yet another futile attempt was made during which the Pt. started bleeding profusely and was then referred to Safdarjang Hospital.	
4. Mrs. B. K.	20-9-83	38 yrs.	G6P5	—? 3 months Amenorrhea, dull pain in the abdomen and not having passed urine. No H/O excessive bleeding during the procedure. PH FH } irrelevant	Since termination of pregnancy two days ago by an Unqualified person.

TABLE I

6 On Examination	7 Laprotomy Findings	8 Operation done	9 Post-operative Period
Vital signs normal systemic Examination NAD P/A muscle guarding + ABD. tenderness + Peristalsis absent on P/V Loop of gut felt in Vagina. Uterus size could not be made out. On Catheterisation: Urine clear.	Perforation in the Posterior Wall of the Uterus, through which the loop of gut had prolapsed into the Vagina.	(1) Bowel resection and Reanastomosis. (2) Repair of the Uterus	Febrile from 2nd to the 5th post-op. day.
Vital signs normal. Systemic Examination NAD P/V loop of intestine hanging outside the introitus. Uterus anteverted and Bulky.	—A big anterior wall perforation with the invaginated loop of gut —Transverse tear in the mesentry.	(1) Bowel resection and Reanastomosis. (2) Repair of the Uterus. (3) Repair of mesenteric tear	Uneventful
Pt. was admitted in a State of shock with B.P. unrecordable, pulse very feeble. R/S clear. CVS Heart sounds audible P/A NAD. P/V OS admitting tip of fingure, Uterus AV, NS, fornices free. No fresh bleeding. Immediate and Intensive resusicitative measures instituted, blood transfusion started.	—An irregular linear tear extending from near the left cornu to almost the isthmus of the Uterus. —The horizontal limb of the Cu-T projecting at the upper end of the tear. —Omentum was adherent on the Uterus.	(1) Omental adhesions separated from the Uterus. (2) Cu-T removed. (3) Tear in the Uterus sutured.	Uneventful
General and Systemic Examination NAD P/A mild tenderness in the lower Abdomen, Uterus 14-16 weeks size. No muscle guarding or rigidity. No suprapubic fullness. Shifting dullness? P/V OS open, perforation felt in the ant. wall of the Uterus, just above the internal OS, Uterus 14 weeks, fornices mildly tender. On Catheterisation, few drops of blood stained urine obtained.	(1) 800 cc of blood stained fluid aspirated from the peritoneal cavity. (2) A big unhealthy perforation in the ant. wall of the Uterus just above the isthmus uteri, involving the fundus of the bladder. (3) Foetus lying in the bladder.	(1) Foetus removed from the bladder (2) Vesical repair done. (3) Subtotal hystrectomy done.	Continuous catheterisation for 3 weeks. Pt. developed UTI which was ultimately treated.

TABLE I (Contd.)

1 Sr. No. & Name	2 Date	3 Age	4 Gravida/ Para	5 Previous History of Interference	
5. Mrs. T. K.	18-8-83	46 yrs.	G5P4+1	Excessive and irregular bleeding p/v for 3 months. No. H/O pain abdomen M.F. 5-6/15-18 Prior M.F. 4/28-32 Last delivery 8 yrs. ago.	Past history of MTP 10 Yrs. ago She had one normal vaginal delivery subsequent to that.

precautions are consciously taken during surgical procedures.

1. Bladder must be empty to avoid displacement of the uterus and interference in its size.

2. Careful assessment of the size and position of the uterus. Note any lateral deviation with acutely anteverted or retroverted uterus, extra care should be taken. Traction on the cervix helps towards bringing the uterus in the midplane of the vaginal axis.

3. Generally in a married primigravida termination of pregnancy should be discouraged as the cervix is more resistant to dilatation thus increasing chances of perforation. To decrease the cervical resistance priming with prostaglandins is suggested.

4. Dilators must be passed gently and in the correct direction just beyond the internal os and not upto the fundus of the uterus.

5. When introducing the dilators, the cervix and uterus must be allowed to move upwards to disperse the forces of dilatation and thus prevent tearing of the cervix and the uterus.

6. Sufficient dilatation of the cervix must be done to allow easy to and fro movement of the instruments.

7. Correct size of the suction cannula to be selected.

8. Attention must be paid towards the suction pressure being used.

9. If perforation is suspected immediately discontinue the use of the suction cannula. The evacuation may be completed under laparoscopic visualisation, depending upon the perforation.

10. Local anaesthesia preferable as chances of perforation are higher with general anaesthesia.

11. Correct measurement of the length of the uterine cavity before inserting a Cu-T. The correct procedure of insertion is important as most perforations occure during the insertion of the IUCD.

TABLE I (Contd.)

6 On Examination	7 Laprotomy Findings	8 Operation done	9 Post Operative Period
General and Systemic Examination NAD P/A NAD P/S cervix healthy P/V OS closed, Uterus AV, firm, bulky, mobile, fornices free and non tender. DUG and Pt. was prepared for ABD. hystrectomy.	Both adenaxa normal. Uterus normal in size. A part of the small gut and part of the bladder adherent to the anterior wall of the Uterus.	Bladder and gut adhesions separated during which intestinal serosal wall was injured and was repaired with atraumatic sutures. Subsequently total abd. hystrectomy with bilateral Salpingo-oophorectomy done.	Pt. was kept on I/V alimentation for 36 hours. Remaining Post-operative period uneventful.

Discussion

It is unfortunate that despite legalisation of abortion such cases report to hospital. Perhaps, worse than a perforation of the uterus is neglect in the diagnosis of a perforation which then may lead to injury to the other abdominal viscera.

The foremost factors determining the incidence of perforation are the surgical experience of the operator and the size of the uterus. Kenslake *et al* quote a group as having done 14050 terminations of pregnancy without a single perforation. Christopher Tietze *et al* in a study of abortions on 42598 women found the incidence of perforation related to the size of the uterus.

In our hospital the incidence of perforation following MTP by suction evacuation in 1982 was 0.1—0.2%.

Perforation of the uterus with Cu-T is rare; clinical reports on more than 4,000 initial insertions with Cu-T collected by the population council showed no evidence of perforation of the uterus (Tatum). However, embedding of endometrium with the tips of Cu-T was common (Timonen).

Case III was probably a type 2-3 partial perforation according to David Zakin Classification.

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