

TRAUMATIC COMPLICATIONS FOLLOWING MEDICAL TERMINATION OF PREGNANCY

by

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It is a well known fact that both legal and illegal terminations of pregnancies are fraught with serious and dangerous hazards like uterine perforation, concomitant intestinal injuries and cervical lacerations, apart from usual complications like haemorrhage, shock, retained placental tissue etc. After legalization of abortion rules, MTPs are being performed both by qualified and unqualified personnel, resulting in increased maternal mortality and morbidity in otherwise healthy women. Hence we have analysed and are presenting 40 cases of various types of traumatic complications following MTP encountered in our unit with a view to find out the avoidable and responsible factors and have also discussed in this study, the prevention and prompt management of this crucial and practical problem.

Material and Methods

From April 1978 to September 1980, 2460 cases of MTP have been performed in our unit. During this period 4 different types of traumatic complications occurred in our cases. (I) Perforation of

uterus-11. (II) Cervical laceration at the tenaculum site-25. (III) Extension of the uterine incision while performing low cervical hysterotomy. (IV) Partial tunnelling and laceration of the myometrium by foetal skeletal parts during II trimester dilatation and evacuation techniques-3. All cases were admitted after preliminary investigation either for SE alone or for SE with concurrent IUD or TAT or for hysterotomy with TAT. The terminations were performed both by well experienced senior, as well as junior doctors and trainees.

Observation

I. Analysis of 11 cases of perforation:

Age: Ten were aged between 21-30 years and 1 was 31 years.

Parity: Three belonged para 2 and 8 belonged to para 3; all were married with no history of induced abortion outside.

Position of uterus: Uterus was found to be retroverted and retroflexed in 4, acutely anteverted in 2 and anteverted in 3 cases. Two were small in size, 8 were between 6-12 weeks size and 1 belonged to border line group 12-14 weeks size.

Sites of perforation were, anterior wall-4, lateral wall-2, posterior wall 3 and fundus-2. The instruments producing perforation were uterine sound in 2, dilators in 7 and suction curette in 2.

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Procedure: Perforation occurred in 9, during suction evacuation and in 2 during curettage.

Management: Evacuation was found to be complete in all cases except one where the rent was extensive and hysterotomy was performed to complete the evacuation. Immediate suturing of the rent was performed in all the patients and concurrent tubectomy was done in 10. Bowel complications were detected in 3 cases. They were mainly serosal injury of the small intestines which were sutured. Contusion and laceration of mesentery was found in 1, which was closed in layers.

Interesting Cases

I. In 1 case where conservative line of treatment alone was undertaken, delayed intestinal obstruction was diagnosed after an interval of 12 days after discharge. Emergency laparotomy was performed and adhesions and kinking of loops of small intestines to the previous perforation site at the fundus and also to the tubectomy site near the left fimbrial end were detected. Bowel was viable and patient was discharged fit later on after relieving the obstruction. In another patient where repair of the rent alone was done, patient reported within 5 months with history of 3 months amenorrhoea, requesting repeat termination and tubectomy this time. On laparotomy, in this case, there were no adhesions, no evidence of previous scar was made out. Patient was discharged this time after successful repeat suction evacuation and tubectomy. This case again illustrates the need for prompt and immediate post termination conception control.

II. In 25 cases where cervical lacerations at the tenaculum site were found, haemostasis was secured by interrupted

chromic catgut sutures and tight vaginal plugging.

III. In 1 multiparous woman among 314 hysterotomy cases done during the above period, where low transverse cervical hysterotomy incision was made (as the foetal parts were being removed) the incision extended into the right broad ligament due to the extreme friability and thinning of the uterine wall, which resulted in profuse brisk haemorrhage with rapid haematoma formation on the right side. As the uterus was found to be very soft, atonic and friable and as the sutures were cutting through, haemostasis could not be secured, hence hysterectomy was performed to control the haemorrhage. This case illustrates the unusual and rare complication of abdominal hysterotomy which may necessitate hysterectomy.

IV. In 3 among 83 cases of 2nd trimester dilatation and evacuation, yet another complication was extensive myometrial laceration, partial tunnelling due to trauma by hard foetal skeletal parts with patchy subserosal haematoma formation (resembling couvelaire uterus). In some cases, treatment requires removal of the clot and suturing the myometrial laceration or if very extensive it may even end in hysterectomy to secure haemostasis, especially when tear involves the major lateral vascular supply of the uterus but none of the patients required hysterectomy.

Discussion

Incidence of perforation reported in the literature with different authors varies from 0.4 to 15 per 1000. Incidence of perforation rate reported are, 1.03 per 1000 in Mukerjee and Rajatanlal (1979) and 0.4 in the series of Beric *et al* (1973). In this series, the general incidence (i.e. both for gravid and non gravid) is about 4.4

per 1000 cases of MTP. The corrected incidence is 3.5 per 1000 as 2 of our cases belonged to lactational amenorrhoea group where the uterus was found to be superinvolted extremely soft and thinned out, where D & C were done to rule out early pregnancy, thereby proving that post partum uteri are more prone to perforation (Mitra *et al* 1980).

According to Jeffcoate (1978) even when the surgeon is skilled, the uterine perforation is a possibility, eventhough with experience the rate decreases—and this observation was found to be correct in our cases as the above perforations occurred mainly when suctions were performed by junior doctors. As described by Mukerjee and Rajatanlal (1979), cervical problem was found to be the main important cause for all types of traumatic complications like perforation, partial tunneling and lacerations. The above problems were obvious in this series, where the multiparous cervixes were found to be extremely hard, friable and indurated with typical incomplete tears and eccentric external os, where some times even sounding was found to be very difficult. In some cases, scarring was detected at the level of the internal os during dilatation, which resulted in perforation of the uterus inspite of employing the screwing type of technique during dilatation (Mukerjee and Rajatanlal 1979).

According to Nemec, *et al* 1978 unknown physiological factors such as extreme mobility during early pregnancy, degree of fixation of the developing foetus to the myometrium and the disproportionate size of the foetus at varying stages of gestation and the soft and thinned out myometrium of the multiparous uterus, were all prime factors in the etiology of trauma during evacuation. In our series

also uterus was found to be extremely mobile as stated by Nemec *et al* 1978, where position of the uterus was very inconstant during early pregnancy (i.e. within 6-8 weeks) thereby resulting in perforation. In spite of traction on the cervix to straighten the utero-cervical canal, perforation occurred which again indicates extreme mobility as an important cause. Vaginal examination should be repeated often when sudden obstruction is encountered during dilatation which may prove to be helpful to prevent this problem. Again, extreme fixation of the developing foetus to the myometrium has resulting in incomplete myometrial laceration and partial tunnelling and haematoma formation during 2nd trimester evacuation operation was found in 3 of our cases. When difficulty in evacuation is experienced it is better to perform hysterotomy to prevent the above problem.

Comments

In this study, 4 types of traumatic complications have been analysed specifically to stress the fact that MTP should be undertaken with care and all precaution. Laymen are usually informed that MTPs are always easy and safe. But there is a potential danger of the above type of hazards which has to be discussed with the patient. The need for post termination contraception and the danger of repeated terminations should be stressed by the gynaecologists when abortion counselling is done.

Summary

1. Extreme mobility of the uterus in early pregnancy, is an important causative factor for perforation of uterus.
2. Immediate laparotomy is the best

choice of treatment when perforation is suspected.

3. A traumatic adequate cervical dilatation is the key to successful suction evacuation which may be obtained by preliminary LT insertion.

4. Rare complications like partial tunnelling, extreme laceration of myometrium during II trimester D & E and extension of uterine incision during hysterotomy which ultimately may result in hysterectomy are reported.

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