

SPONTANEOUS UTERINE RUPTURE THROUGH PERFORATION SCAR OF PREVIOUS CURETTEMENT

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SYNOPSIS

A case of spontaneous rupture of uterus from a perforation of uterus at a previous curettage is reported. The ruptured scar at the fundus uteri was repaired. A subsequent pregnancy resulted in a live birth by emergency lower segment caesarean section at 35 weeks.

A dilatation and curettage has potential hazard of perforation of uterus and should not be done with complacency. Antibiotic cover decreases the morbidity.

INTRODUCTION

A review through the literature has shown a great deal of information on the damage to extraperitoneal tissue from accidental perforation of the uterus during the simple procedure of a dilatation and curettage (D&C). Very little has been reported about the uterine rupture in pregnancy following a perforation of uterus at dilatation and curettage. So far five cases were documented (1-5).

CASE REPORT

A 27 year old Chinese housewife had a termination of pregnancy at 8 weeks gestation a year ago. Perforation of the uterus was not recognised at the time of dilatation and curettage and was not recorded. Four months later she conceived. She was admitted in labour at term. Five hours later the abdomen was tense and distended. There was cessation of foetal movements. Foetal heart could not be heard.

At laparotomy a crescentic tear was seen at the fundus uteri. It stretched from one cornu of the uterus to the other. The baby was expelled into the peritoneal cavity except for its head which was trapped inside the uterus. At the edges of the uterine rupture the old scar of a previous dilatation and curettage was visible. About 2 litres of blood were in the peritoneal cavity. The fresh stillbirth was delivered and the crescentic tear repaired with chromic catgut.

Three years later she conceived again. This time she was admitted to the ward for close observation at 32 weeks. At 35+ weeks she had sudden onset of abdominal pain over the fundus uteri.

An emergency laparotomy showed the scar tissue was tissue-paper thin at the 2 cornua. A live male baby, birth weight 2700 gms was delivered by lower segment caesarean section. The scar over the fundus was resutured.

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DISCUSSION

It is impossible to assess the incidence of uterine perforations which occur in a dilatation and curettage. Often the accident is not recognised by the surgeon. Usually the dilator or curette is "lost" ie, it has gone beyond the corpus uteri (6). Marked localised tenderness and excitation of the cervix may be present in the post-operative period.

Mair (5) reported the incidence of uterine perforations as 1: 273 curettages.

Radman et al (7) recorded 27 perforations in 22, 179 curettages ie, an incidence of 1: 472.

Decker and Zanuski (8) found 51 cases of perforation of uterus out of 10,105 curettements. Only one death was reported (no antibiotics given). Radman et al (7) had a zero mortality rate. Morbidity is well controlled by adequate antibiotic therapy.

Perforation of the uterus is an ever present possibility in the process of dilatation and curettage (10).

Uterine perforation is prone to occur in 1) the pregnant uterus 2) the uterus under the influence of oral contraceptives 3) the menopausal uterus 4) the malignant uterus.

There is no place for complacency in the perforation of a pregnant uterus. A laparotomy should be done to assess the site and size of the perforation and the integrity of the adjacent organs. The dilatation and curettage can be completed under vision at laparotomy. If internal abdominal haemorrhage or extra-uterine trauma is suspected immediate laparotomy is mandatory. If the perforation is at the uterine fundus haemorrhage may be minimal. If the perforation is at the lateral wall in the area of uterine vessels concealed haemorrhage may occur.

Scars at the fundus uteri tend to rupture at about 35 weeks. Mair (2) treated a similar case with subtotal hysterectomy. The case reported here was repaired since she had no live child. At a subsequent pregnancy the scar gave way at 35 weeks and the baby was saved by a timely caesarean section.

If the scar is at the lower uterine segment it tends to rupture in labour. Kay (2) reported a case of a normal vaginal delivery where an exploration of the uterus revealed

the torn lower uterine segment.

Briscoe (9) suggests routine exploration of the uterus in cases of severe post-partum haemorrhage to exclude uterine rupture.

CONCLUSION

Most cases of uterine rupture (11) reported in literature ended in a subtotal hysterectomy or total hysterectomy. This case had a repair of the tear at the fundus. It was followed by a viable pregnancy delivered by emergency caesarean section at 35 weeks. As abortion is freely available, one must bear in mind the risk of perforation each time a termination of pregnancy is performed and its effect on the patient's subsequent obstetric course.

REFERENCES:

1. Fletcher H H : Spontaneous rupture of uterus during pregnancy. *J of Obst & Gyn of Brit Empire* 1935; 42: 848-51.
2. Kay F M: Spontaneous uterine rupture through perforation scar of previous curettement. *Obst and Gyn* 1955; 6: 228-30.
3. Buterman I and Fields D: Uterine rupture. *The Female Patient* 1976; 1: 54-6.
4. Knell JA, Radman HM: Uterine rupture due to perforation at a previous curettage. *MD State Med J* 60, Oct. 1978.
5. Mair J: Rupture of the uterus in labour due to previous perforation of its wall at curettage. *J of Obst and Gyn of the Brit Empire* 1950; 57: 539-41.
6. Murray PM, Winkdstein LB: Perforation of the uterus. *Am J Obst and Gyn* 1951; 62: 1262-72.
7. Radman H M, Karman V: Uterine perforation during dilatation and curettage. *Obst and Gyn* 1963; 21: 210-5.
8. Decker W H, Zanuski B W: Accidental perforation of the uterus. *Am J Obst and Gyn* 1953; 66: 345-53.
9. Briscoe C C: Routine exploration of the uterus of retained secundines. *Obst and Gyn* 1954; 4: 375-9.
10. Word B: Current concepts of uterine crettage. *Postgrad Med* 1960; 28: 450-6.
11. Chew S Y: Uterine rupture in present day obstetrics. *Singapore J of Obstet. Gynae* 1980; 3, 15-20