# ABRUPTIO PLACENTAE INITIATED BY TRAUMA FOLLOWING BULL-GORE INJURY

**Case Report**

by

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Trauma as a cause of abruptio placentae is uncommon and occurs in less than 5 per cent of cases. The symptoms noted in this obstetrical complication associated with trauma are usually of less severity than in those cases associated with toxaemia and hypertension.

The following case is a rare one where abruptio placentae was caused by a bull-gore injury to the abdomen. A case of severe abruptio placentae due to an automobile accident has been previously reported (Murray, 1964).

**Case Report**

Mrs. R., No. 147780, aged 39 years, was admitted to the casualty department of this hospital on September 29, 1966, at 2.40 p.m. about one hour forty minutes after a bull-gore injury to the abdomen. She was gravida 11, having had previous seven full-term normal deliveries and three abortions, out of which two were induced. She was at the 28th week of pregnancy having had no antenatal care.

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On examination, patient did not appear to be in pain. She was quiet and calm. General condition was good with a pulse rate of 80 per min., and blood pressure of 140/90 mm Hg.

The lower abdomen appeared to be full and a penetrating wound 1 cm. in diameter, 4 cm. below the umbilicus and 6 cm. to the left of the midline, could be made out through which the omentum was visualized. On palpation, the uterus was enlarged to about 28 weeks' size, and the presentation was breech. The foetal heart sounds were good and the rate was 140 per min. There was slight tenderness over the fundus of the uterus on the left side and at the site of injury. Uterus was soft and not acting. There was no bleeding from the wound.

An emergency laparotomy was done under general endotracheal anaesthesia. Abdomen was opened in layers by a left sub-umbilical paramedian incision. The upper part of the peritoneum was found to be torn irregularly, more on the left side. There was injury to the left rectus muscle with a haematoma in it. Peritoneal cavity contained nearly 100 ml. of fresh blood and some clots.

Uterus was enlarged to 28 weeks' size with a small bruise at the left cornual end. The left fallopian tube was found to be severed from the uterus just at the cornual end. There was no active bleeding and the injury to the uterine wall was found to be quite superficial. Right fallopian tube and both ovaries were normal. Intestines were examined and were not injured. There was

a small bleeding point in the omentum which was clamped and ligated. The portion of omentum which was protruding through the wound was excised and removed. Left salpingectomy was done as it was severed from the uterus and right fallopian tube was ligated. The small rent in the uterine muscle was sutured with catgut. Abdomen, after mopping off the blood, was closed in layers. The upper part of the peritoneum could not be approximated as it was torn irregularly. A drainage tube was left in.

The general condition of the patient at the end of the operation was satisfactory with a pulse rate of 110/min. and blood pressure of 130/80 mm Hg. Patient had 300 ml. of normal saline. Postoperatively she was put on continuous gastric suction and maintained on intravenous fluids. Broad spectrum antibiotics were given. Continuous gastric suction was discontinued after 24 hours and the drainage tube removed. She was sedated well with morphia, 10 mgm. given intramuscularly every six hours for 48 hours. No uterine contractions were noticed for the first 24 hours after the operation. Twenty-eight hours after surgery (10 P.M. on 30-9-66) there was slight tenderness over the uterus and uterine contractions could be made out. She complained of abdominal pain and backache only, 32 hours after the operation. On examination, uterus was found to be acting and relaxing, with tenderness over the left side which could not be well differentiated from the pain due to the surgery. Foetal heart was heard but was rapid, 160/min. Membranes were seen bulging at the vulval outlet and she delivered normally a premature male baby, weighing 1000 gms., 36 hours after operation (6.35 A.M. on 1-10-66). The baby breathed at birth but did not cry, and was kept in an incubator, but expired 2 hours after birth.

Placenta was not expelled for 30 minutes after the birth of the child. On pelvic examination it was found to be partially lying in the upper vagina, and was removed. There was a small depression, 6 cm. in diameter, on the surface of the placenta and 3-4 ozs. of retroplacental clots. No postpartum haemorrhage occurred. The weight of placenta was 250 gms. The postoperative course was uneventful. Sutures were removed on 10-10-66 and she was discharged. She attended the postnatal clinic after six weeks and nothing abnormal was detected.

*Discussion*

Abruptio placentae is met with quite frequently and in some cases it is responsible for the death and expulsion of the ovum in the earlier periods of pregnancy as well. The commonly quoted contributory factors in abruptio placentae which were present in this case were relatively advanced maternal age, multiparity and hypertension of 140/90 mm of Hg. There was no history suggestive of separation of the placenta prior to the injury. "Direct blows to the abdomen may also cause abruption, although it is remarkable how much violence the average pregnant uterus can withstand without suffering this complication." (Mudaliar, 1962). The clinical features of abruption of placenta were noted a few hours after the injury. The injury was directed towards the uterus which might have caused abruption of the placenta. Though bull-gore injury is common in India, abruptio placentae due to it is quite rare. It is wise to subject to laparotomy all cases of abdominal bull-gore injuries, however small the external injury may be.

*Summary*

A case of multigravida in the 3rd trimester of pregnancy who sustained injury to the uterus due to bull-gore injury is reported. She was operated on immediately after admission but the damage to the foetus

could not be avoided as the injury resulted in abruption of the placenta.

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