

# Spontaneous Hemoperitoneum in Pregnancy - A Rare Case

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## ABSTRACT

**Introduction:** Spontaneous haemoperitoneum is rare during pregnancy but a life threatening complication. It is considered idiopathic as the source of bleeding is not known.

**Case report:** Presenting here a case of 20 years primigravida patient who was taken up for caesarean section because of persistent foetal tachycardia. Patient had no significant past or family history, had normal hemogram and coagulation profile with all other normal investigations. Unexpectedly intra-operatively hemoperitoneum was observed for which no identifiable cause could be established.

**Conclusion:** Though it is a rare entity but it can be life threatening. Shock and foetal distress have a much more gradual onset when the amount of bleeding is less severe.

**Keywords:** Spontaneous Haemo-Peritoneum, Utero-Ovarian Vessels, Rupture

## INTRODUCTION

Spontaneous haemo-peritoneum is defined as bleeding in the peritoneal cavity of non traumatic and non iatrogenic etiology in pregnant patient. Spontaneous haemo-peritoneum is considered idiopathic when the source of bleeding is not detected during caesarean section/laparotomy.<sup>1</sup> Spontaneous venous rupture is a very rare condition (1/10000 pregnancies).<sup>2</sup>

## CASE REPORT

A 20 years old primigravida patient presented with pain lower abdomen which was gradual in onset, continuous, radiating to back, with 34+1 weeks period of gestation with no significant past or family history. General physical examination was normal. No pallor, icterus, cyanosis, edema or lymphadenopathy seen. Systemic examination was also normal. On per abdomen examination uterus was 34 weeks size, relaxed with foetal heart rate of 170bpm regular. Her Hb-10.2gm% TLC-12,200/mm<sup>3</sup>, platelet-3.6lac, with PTI/INR of 93.3% and normal bleeding and clotting time. LFTs, RFTs and S.E. were normal. USG showed single live intrauterine pregnancy of 33+4 weeks with placenta lying anteriorly, adequate liquor and normal Doppler study.

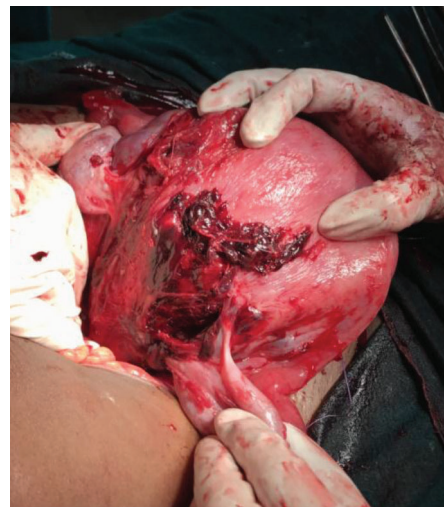
Patient was taken for caesarean section when persistent foetal tachycardia was observed. Intra operatively there was blood in the peritoneal cavity (clotted/old~400 cc) which was suctioned and the baby was extracted out safely. Slight ooze was present along with laceration of around 7\*7cm near right ovary. Abdominal cavity was explored by surgeon to rule out any other cause of bleeding but no cause was found. Abdomen was closed after achieving complete hemostasis with intra abdominal drain placement. Patient stood the

procedure well and shifted out in a stable condition. The post op period was uneventful and patient discharged in satisfactory conditions on 8<sup>th</sup> post operative day.

## DISCUSSION

Diagnosis is difficult because it is a rarity and because of non specific clinical picture and absence of the main risk factors. Haemo-peritoneum during pregnancy as a result of ruptured uterine vessels is a rare but life threatening condition. The etiology is yet poorly understood and subject to speculation.<sup>3</sup> Hodgkinson and Christiansen<sup>4</sup> suggested the possible cause was dilated utero-ovarian vessels resulting from increased physiological demands of pregnancy and muscular activities such as coughing, defecation, coitus or pushing during second stage of labour which cause a sudden rise in venous pressure. The tortuous nature, lack of valves and repeated distension of veins during pregnancy predispose them to rupture<sup>5</sup>

The rupture usually occurs in third trimester. The presenting symptoms are usually non specific. The most common



**Figure-1:** Intra operative rent seen on posterior surface of uterus

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place where it happens are broad ligaments (78.3%), the back surface of uterus (8.3%) and anterior surface of uterus (3.3%) according to Andres-Oros MP, et al.<sup>2</sup>

It may be because of decidualised endometriosis on the utero-ovarian vessel wall.<sup>6,7,8</sup> In this case the patient presented with pain lower abdomen and persistent foetal tachycardia for which caesarean section was done and the hemoperitoneum was detected incidently. The other treatment modality can be arterial embolisation which is effective and safe.<sup>9</sup>

## CONCLUSION

Diagnosis is difficult because it is a rarity and because of non specific clinical picture and absence of main risk factors. Hemoperitoneum during pregnancy as a result of ruptured uterine vessels is rare but life threatening condition and the etiology is yet poorly understood.

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