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An Unusual Case of Idiopathic Spontaneous Hemoperitoneum in the First Trimester of Pregnancy

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Abstract: ***Spontaneous hemoperitoneum in Pregnancy is an unprovoked, obstetric catastrophic event. It is defined as bleeding in the peritoneal cavity of non traumatic and noniatrogenic etiology in pregnant women. This dramatic pregnancy complication is associated with a high incidence of maternal as well as perinatal mortality and morbidity. Presenting a 33-year-old, G5P4L4, unregistered case, at 6 weeks and 5 days period of gestation, was referred from periphery hospital in view of sudden onset of severe acute pain abdomen associated with four episodes of vomiting and in hypovolaemic shock with a tense and distended abdomen. Gross hemoperitoneum with intrauterine gestational sac corresponding to 6 weeks and 2 days with evidence of no cardiac activity along large fibroid was showed in the abdominal scan. Immediate exploratory laparotomy revealed a 20-week gestational-size of subserosal fibroid. A myomectomy was performed. The exact source of the bleeding remained obscured even after careful exploration of abdominal organs, visceral arteries, and veins by surgical team. Diagnosis is difficult because of non-specific clinical picture and absence of main risk factors. Spontaneous hemoperitoneum in first trimester is a rare but life threatening condition and its etiology is yet poorly understood. Identifying and addressing the source of severe bleeding is very challenging.***

Keywords: Spontaneous hemoperitoneum in pregnancy (SHiP)

1. Introduction

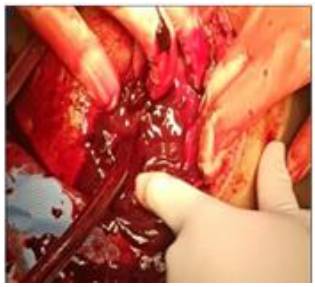
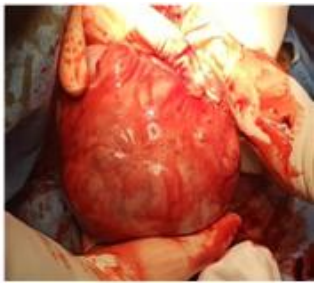
Spontaneous hemoperitoneum in Pregnancy is an unprovoked, obstetric catastrophic event. It is defined as bleeding in the peritoneal cavity of non-traumatic and non-iatrogenicetiology in pregnant women which occurs mainly in the second and third trimester of pregnancy [1]. It is considered idiopathic when the source of bleeding is not detected during the exploratory laparotomy. This dramatic complication is associated with high incidence of maternal as well as perinatal mortality and morbidity[1]. Here I present the rare case of idiopathic spontaneous hemoperitoneum in first trimester of pregnancy.

2. Case Report

A 33 year old, Gravida 5 Para 4 Living 4 at 6 weeks and 5 days period of gestation, unregistered case, referred from periphery hospital in view of sudden onset of severe acute pain abdomen diffuse in nature, non radiating type of pain associated with four episodes of vomiting. She denies history of trauma to the abdomen and no bowel and bladder irregularities. There was no history of previous medical, gynaecological and surgical history. She was not on any anti coagulants and reported no other medications or supplements. Further history did not reveal any bleeding dyscrasia and she had no family history of vascular anomalies such as aneurysms or vascular malformations.

On examination, there was marked pallor with a pulse of 138 beats /min, BP of 90/70mmhg.

On abdominal palpation there was tenderness and a mass corresponding to 16 week gravid uterus with regular borders and lower margin was not palpable. Pelvic examination confirmed the above findings and revealed deviation of cervix to the left with minimal bleeding through the os. Cervical motion tenderness and bilateral forniceal tenderness was also noted. Abdominal ultrasound revealed gross hemoperitoneum, intrauterine gestational sac corresponding to 6 weeks and 2 days with evidence of fetal pole with no cardiac activity, along with a large subserosal fibroid of size 11 x 9 cm. Provisional diagnosis of fibroid uterus with hemoperitoneum of unknown cause was made. Her Hb-6.2gm%, TLC-16, 700/cumm, platelet-1.78lac with PT INR of 1.19. LFTs, RFTs and Serum electrolytes were normal. Medicine reference was sought in view of unstable vitals. In view of the hemoperitoneum the immediate decision was taken to carry out exploratory laparotomy. On laparotomy, there was 1liter of hemoperitoneum and the uterus was enlarged to the size of a 14-16 week. Operative findings are the presence of a bulky uterus with large subserosal pedunculated fibroid of 12 x 10 cm arising from the left cornu of the uterus surface. The paracolic gutters and pouch of douglas were filled with blood. There was no evidence of uterine rupture. Ovaries, fallopian tubes and utero-ovarian vessels were all normal. Careful and thorough examination of the visceral arteries, veins and solid organs by surgical team was done to rule out any other cause of bleeding but no cause was found. Myomectomy was done. Abdomen was closed after achieving complete hemostasis with intra abdominal drain placement. She received total 4 units of packed RBCs and 2 units of fresh frozen plasma transfusions. Patient withstood the procedure well and shifted out in a stable condition. Postoperative diagnosis was made as Idiopathic Spontaneous Hemoperitoneum in first trimester of Pregnancy. On postoperative day 8 repeat abdominopelvic scan showed complete abortion and it was further correlated with beta hcg. Histopathological examination of the surgical specimen reported a leiomyoma of the uterus. Patient was discharged after 15 days of postoperative hospitalization without further complications.

3. Discussion

Spontaneous hemoperitoneum in pregnancy (SHiP) is a relatively rare condition presenting more often with diffuse abdominal pain, vomiting with cardiovascular instability which is associated with maternal and perinatal mortality [2].

Of cases reported in literature, 61% occurring during the antepartum, 18% labor and 21% early postpartum periods [3]. There are multiple causes of spontaneous hemoperitoneum classified based on the bleeding source which may include hepatic, splenic, renal, adrenal, gastrointestinal, gynecological and vascular [4]. Furthermore, hemoperitoneum in first trimester is rare and it is usually caused by an ectopic pregnancy, adnexal torsion, ruptured appendix, endometriosis, acute bleeding from a blood vessel overlying uterine leiomyoma or ruptured vasculature of the liver or spleen and disorders of anticoagulation but it is extremely rare being spontaneous. Endometriosis is another factor which has been implicated in some cases, this patient did not demonstrate any evidence of endometriosis at operation [5]. In addition, a correct preoperative diagnosis based on a clinical entity is difficult because it is usually related to non-specific symptoms of acute abdominal pain, vomiting and maternal anemia and it is more frequently misdiagnosed as placental abruption especially when lacking ultrasonographic evaluation[6]. In this case even though immediate laparotomy was carried out and a large quantity of blood was found in the abdominal cavity, active bleeding was not noticed and the origin of bleeding could not be established and the diagnosis remained as idiopathic. Although, the occurrence of idiopathic spontaneous hemoperitoneum is rare in pregnant women, awareness to this condition and prompt action must be considered when evaluating pregnant patients with an acute abdomen and free fluid in the abdominal cavity[7].

4. Conclusion

Idiopathic spontaneous hemoperitoneum in first trimester is rare but life-threatening condition and etiology is yet poorly understood. Every pregnant patient presenting with severe abdominal pain, vomiting and impending hypovolemic shock should be carefully evaluated. After ruling out the more prevalent causes of hemoperitoneum, idiopathic spontaneous hemoperitoneum should be considered. Diagnosis is difficult because of non specific clinical picture and absence of main risk factors. Identifying and addressing the source of severe bleeding is very challenging.

References

[1] Mazrin Nur MA, Rohana I, Hamidah H, Syauki H, Roziana R. Idiopathic spontaneous haemoperitoneum in pregnancy. Int J Reprod Contracept ObstetGynecol2017;6:4120-2.
[2] Mattison DR, Yeh SY. Hemoperitoneum from rupture of a uterine vein overlying a leiomyoma. Am J Obstet Gynecol. 1980 Feb 1;136(3):415-6.
[3] Wong, L., Ching, T. W., Kok, T. L., & Koon, T. H. (2005). Spontaneous hemoperitoneum from a uterine leiomyoma in pregnancy. Acta Obstetricia et Gynecologica Scandinavica, 84(12), 1208–1209.
[4] Koifman, A., Weintraub, A. Y., & Segal, D. (2006). Idiopathic spontaneous hemoperitoneum during pregnancy. Archives of Gynecology and Obstetrics, 276(3), 269–270.
[5] Bertholdt C, Vincent-Rohfritsch A, Tsatsaris V, Goffinet F. Placental Abruption Revealed by Hemoperitoneum: A Case Report. AJP Rep. 2016 Oct;6(4), 424-e426.
[6] Wu CY, Hwang JL, Lin YH, Hsieh BC, Seow KM, Huang LW. Spontaneous hemoperitoneum in pregnancy from a ruptured superficial uterine vessel. Taiwan J Obstet Gynecol. 2007 Mar;46(1):77-80.
[7] da Silva CM, Luz R, Almeida M, Pedro D, Paredes B, Branco R, Pereira A. Hemoperitoneum during Pregnancy: A Rare Case of Spontaneous Rupture of the Uterine Artery. Case Rep Obstet Gynecol. 2020 Oct 8;2020:8882016.