A Rare Case of Acute Abdomen – Hemoperitonum Without History of Trauma, with Ruptured Ectopic Splenic Pregnancy

Dr. Avdhut Chandrashekhar Gandhi¹, Dr. Debesh Anand², Dr. N L Vyas³, Dr. Ashok Kalyanshetti⁴

¹3rd Year M.S.Surgery PG Resident, MGM Hospital and College
²Senior Resident in the Department of General Surgery, MGM Hospital and College
³Professor in the Department of General Surgery, MGM Hospital and College
⁴Professor and Head of the Department of General Surgery, MGM Hospital and College, Navi Mumbai

Abstract: Incidental Primary Splenic Pregnancy is the least common form of Extrauterine Pregnancy approximately <1.3%. We report a case of Incidental Splenic Pregnancy occurring in 20 years old woman presented with acute abdomen and hemoperitonium. Recognition of this rare form of acute abdomen is of critical importance, owing to risk of exsanguinations and death.

Keywords: acute abdomen, hemoperitonium, ectopic pregnancy, splenic pregnancy, splenorraphy

1. Introduction

The term acute abdomen refers to sudden, severe abdominal pain of under etiology with duration of less than twenty four hours. There are many causes of acute abdomen as an emergency but due to abdominal pregnancy is very rare entity.[4]

The most common site of ectopic implantation within fallopian tube 95% and remaining 1.3% of ectopic pregnancy are abdominal and other with direct implantation on peritoneal surface which includes liver, small and large intestine. Spleen is one of the rarest case of ectopic gestation.[6,7]

2. Case Report

A 20 years old female, married eleven months back presented to our hospital with severe diffuse left upper quadrant pain since 2-3 days. Patient c/o pain that begun few weeks back. On the day of admission in morning presented to casualty with c/o acute pain in abdomen. Patient also c/o dizziness with two episodes of vomiting. She had no h/o trauma.

Physical examination revealed, patient is in distress and toxic. She was febrile, pulse rate -130/min, hypotensive, BP 80/60 with continuous fall in blood pressure. Pallor +++. On her abdominal examination she had significant diffuse tenderness, distention, guarding and rigidity. Menstrual history was not revealed properly as patient was in distress and accompanying relative were not aware off. Patient was having outside ultrasonography of abdomen and pelvis, report s/o bilateral moderate to severe fluid collection, probably hemoperitonium with bilateral normal fallopian tubes and ovaries, there is no evidence of intrauterine gestational sac.[6]

Patient was taken for emergency laparotomy for hemoperitonum. Midline incision taken, intraoperatively about two lit of blood and blood clots were found in peritoneal cavity. All structures of abdomen- omentum, peritoneum, liver, intestines were normal. Uterus, fallopian tubes and ovaries were also apparently normal. But when spleen visualized and seen, showed hemorrhagic adhesions on superior surface with active bleeding and had blood clots in left splenic gutter. Chorionic tissue with gestational sac was identified over superior pole of spleen. Immediately intraoperative urine and blood sent for urinary pregnancy test and B-HCG respectively. Tissue adherent to superior pole of spleen was gently removed and sent for histopathological examination. No other bleeding source was noted. Splenorrhaphy[1,2] was done. UPT results were positive and B-HCG was >15000mu/ml suggestive of ruptured ectopic pregnancy. Post operatively patient shifted to SICU. Patient recovered and B-HCG was done after POD-7, it was 802mu/ml. Histopathological report confirmed the presence of trophoblastic tissue (chorionic vill and decidua) with splenic tissue with gestational sac.

3. Discussion

Acute abdomen presenting with hemoperitoneum with abdominal splenic pregnancy is very rare entity. There are few situations in clinical medicine which demand prompt and decisive action as frequently as does acute abdominal pain. Acute conditions of the abdomen are produced by inflammatory, obstructive, or vascular mechanisms and are manifested by sudden onset of abdominal pain, gastrointestinal symptoms and varying degrees of local and systemic reaction. They require urgent treatment, often including emergency operation. Their urgency usually precludes prolonged investigation. Abdominal pregnancy defined as those occurring within peritoneal cavity. The incidence of hemoperitoneum due to abdominal pregnancy is rare with <1.3%, splenic pregnancy maybe caused by abnormal peristalsis of zygote, fallopian tube or inverse peristalsis into abdominal cavity which is not absorbed by peritoneal cavity. Splenic implantation sites range from superior pole and hilum. Most gestations manifest as capsular projections and all were subcapsular in location. Abdominal pregnancies are either primary or secondary, latter one is much more common. Primary abdominal pregnancy which arise from fertilization of an ovum presented with hemoperitoneum are extremely rare.
Interestingly in splenic gestation size ranged from 2.0 to 3.5 cm, suggesting that rupture of the splenic capsule occurs when the ectopic gestation exceed this size. Primary splenic preganancy tends to present symptoms earlier than other abdominal pregnancies, most patient presented with acute abdomen with hemoperotoneum. But because of abudanat blood supply, splenic ectopic pregnancy tends to have massive peritoneal bleeding and patient usually present to an emergency in critical condition with acute abdomen.

4. Conclusion

In conclusion, recognition of this rare form of acute abdomen presenting as hemoperitonum without any history of trauma with splenic ectopic pregnancy is of critical importance owing to risk of exsanguination and death and should be considered in the differential diagnosis of acute abdomen in women of reproductive age.

References


Figure 1 (a): Superior pole of spleen showing blood clots with gestational sac.

Figure 1 (b): Spleen after removal of gestational sac.