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Case Report

Ruptured corpus luteum cyst in women on anticoagulant: conservative or surgical management a clinical dilemma

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ABSTRACT

Ruptured corpus luteum cyst is a common finding in women of the reproductive age group, but hemoperitoneum in a case of reputured corpus luteum cyst in women on anticoagulants is an uncommon finding. Thus, management in such cases can be done by dose adjustment of anticoagulants. A woman had come to the emergency with complaints of pain distention of abdomen. Her USG showed adenexal mass with hemoperitoneum. She was on anticoagulants. Her coagulation profile was deranged. Patient was managed conservatively with dose adjustment and transfusion of blood and fresh frozen plasma. Hemoperitoneum due to ruptured corpus luteum cyst in reproductive age group have a similar presentation with ectopic pregnancy. In women in this age group pregnancies should be ruled out. Patients on anticoagulants may not require laparotomy and can be managed conservatively.

Keywords: Anticoagunants, Corpus luteum, Hemoperitoneum

INTRODUCTION

Ruptured corpus luteum cyst with hemoperitoneum is commonly seen in women of the reproductive age group. Corpus luteum hemorrhage may occur spontaneously or often triggered by coitus, trauma, exercise, or vaginal examination.[1]

Differential diagnosis usually being ruptured ectopic pregnancy. But ruptured corpus luteum with hemoperitoneum in women on anticoagulants is a rare complication. Its presentation is variable; sometimes it can be massive requiring surgical intervention and blood transfusion.

Patients on anticoagulation are at higher risk for significant severe hemorrhage from ruptured corpus luteum.[2] Hence an accurate diagnosis based on history, clinical examination and investigation is necessary for proper management.

CASE REPORT

A 22 year old lady presented with pain abdomen, abdominal distension and breathing difficulty for 2 days, in emergency department of our hospital. She was P3L3 with previous normal delivery 2 years back. Her menstrual cycle was normal and had normal menses 15 days back. She had undergone mitral valve replacement 1 year back and was on anticoagulant warfarin 2.5 mg once daily. One month back she was admitted in neurology ward for 15 days due to ischaemic stroke. On examination her pulse rate was 96/min and blood pressure 100/70 mm of Hg, pallor was mild. On per abdominal examination there was slight distension and per speculum and per vaginal examination were within normal. Urine pregnancy test was negative. Ultrasound

showed moderate haemoperitoneum with enlarge adnexa and reported the possibility of ectopic pregnancy. Her haemoglobin was 8 gram %, beta HCG was negative, coagulation profile was deranged and prothrombin time was 6 times normal. The diagnosis of ectopic pregnancy as suggested by sonography was ruled out due to normal beta HCG and ruptured corpus luteum leading to haemoperitoneum due to coagulation abnormality was considered as provisional diagnosis. Patient warfarin was stopped and 6 units fresh frozen plasma was transfused. After 12 hour patient haemoglobin was 4 gram%. And pulse rate was 80 per minute, BP 100/70 mm of Hg and prothrombin time was normal. As vitals were stable it seems that there was no evidence of ongoing intraperitoneal haemorrhage. Patient was transfused 2 units of blood and was provisionally kept prepared for laparotomy in case she developed haemodynamic instability. However, patient remained stable and her haemoglobin build up after blood transfusion. On the fourth day as per advice of cardiac surgeon anticoagulant therapy was reintroduced at a lower dose to prevent any cardiac thrombo embolic episode. She was observed for 15 days in the hospital and was discharged in a fit condition.

DISCUSSION

In a case study of 3 cases Nupur et al have reported 3 cases of corpus luteum haemorrhage due to congenital or acquired coagulation abnormality, 2 cases were treated with laparotomy.[3] The third patient was treated with fresh frozen plasma and blood transfusion only. In a similar study on haemoperitoneum associated with ovulation in women with bleeding disorder, Payne JH et al have reported 3 patients who presented with haemoperitoneum in association with factor 7 deficiency, factor 10 deficiency and cholesterolemia.[4] They concluded that conservative management with blood products and factor concentrate support was successful in avoiding surgery in 3 of the 5 episodes of bleeding. Chao W et al has reported a similar case of haemoperitoneum in a 17 years old girl with aplastic anaemia treated with surgery and treatment of blood disease.[5] Cetinkaya SE et al has reported a case of 24 years old woman with congenital afibrinogenemea with recurrent massive intraperitoneal haemorrhage due to ovulation.[6] Exploratory laparotomy was done for the first bleeding episode and subsequent episode was managed by fresh frozen plasma with blood transfusion. Ara A et al in their case report also reported two cases where hemoperitoneum was managed conservatively and also various case reports have shown that in case of rupture corpus luteum cyst can be managed conservatively with transfusion of blood and other factors.[7-10]

CONCLUSION

Haemoperitoneum due to ruptured corpus luteum may be confused with ectopic pregnancy due to similar clinical presentation and sonography picture but may be ruled out due to normal βHCG. In patients on anticoagulant therapy with spontaneous massive haemoperitoneum coagulation disorders should be ruled out. If there is any altered coagulation profile supportive treatment with transfusion of blood and fresh frozen plasma may be sufficient without any need for surgery.

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