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MASSIVE SPONTANEOUS IDIOPATHIC HAEMOPERITONEUM: CASE REPORT

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SUMMARY

Spontaneous haemoperitoneum is often associated with ectopic gestations, aneurismal ruptures or intra-abdominal malignancies. Idiopathic sources are extremely rare. We present a woman in her thirties with history of pregnancy who had spontaneous haemoperitoneum. She had uneventful recovery following surgery with no identifiable significant causes of bleeding. Spontaneous idiopathic haemoperitoneum is rare, prompt diagnosis with rapid restoration of circulatory volume remain keys to achieving good management outcome.

INTRODUCTION

Massive haemoperitoneum commonly results from abdominal trauma or rupture of ectopic gestation. Only very seldom has this phenomenon been described without eventual discovery of a precipitating factor.

Spontaneous idiopathic haemoperitoneum which is uncommon and very often an unsuspected condition may be catastrophic if massive, and if not promptly diagnosed and treated. It presents as an acute surgical emergency often associated with high morbidity and mortality (1). Simultaneous rapid diagnosis and restoration of circulating volume are keys in determining the patient outcome. Though the mortality is high if untreated, operative treatment is relatively simple and carries a low risk (2).

We present a case of massive spontaneous haemoperitoneum occurring in a woman in whom no cause for the bleeding was found.

CASE REPORT

AM was a 32 year woman who presented in our emergency room with complaint of dizziness and progressive abdominal pain. She had slumped in the bath a few hours prior to presentation following a blackout. She was 26 weeks pregnant and the pregnancy had been uneventful until then. Examination revealed a markedly pale lady who was restless, afebrile to touch with altered sensorium. The pulse rate was 138 beats per minute with a Blood pressure of 90/60mmHg and respiratory rate of 36/min. The abdomen was distended and tender. Following a positive four quadrant tap and PCV of 15% diagnosis of ruptured ectopic gestation was made.

The patient was commenced on oxygen by nasal prongs, two intra-venous lines were secured and blood cross-matched. Emergency surgery was undertaken, with the surgical team called in when a gynaecological source of bleeding was not found. Findings included four liters of haemoperitoneum, 26 weeks gravid uterus that was intact, with normal tubes and ovaries. Other intra-abdominal viscera appeared normal. A thorough search was made for the source of bleeding but none was found. Auto transfusion of 1.5 liters was achieved. A drain was left *in-situ* and the wound closed. The patient subsequently had four units of whole blood, expelled the fetus the following day but had an uneventful recovery and was discharged home on the thirteenth day on admission with a PCV of 32%.

DISCUSSION

Spontaneous intra-peritoneal haemorrhage was first reported in pregnancy by Barber in 1909 and later termed "abdominal apoplexy" by Green and Powers in 1931. Since Barber's report, several authors have reviewed the condition citing different causes for the presence of blood in the abdominal cavity (2).

Very often, Intra-abdominal haemorrhage is secondary to trauma, which may be blunt or penetrating with the spleen and liver being the greatest culprits. In female of reproductive age,

common causes of spontaneous haemoperitoneum include rupture of ectopic gestation early in pregnancy or uterine rupture in late pregnancy. Other causes of spontaneous bleeds include aneurismal rupture (central or visceral), solid organ malignancy (hepatic or renal), or inflammatory erosive processes (pancreatic pseudocyst), rupture of ovarian artery, or ruptured Graafian follicle. Bleeding may however be idiopathic (2).

Idiopathic haemoperitoneum is a very rare entity. It accounts for a small percentage of all reported spontaneous haemoperitoneum. The true incidence of this condition is however unknown. It is most common between 55 and 64 years with a male to female ratio of 3:2 (3). Idiopathic bleeds are believed to be vascular bleeds which have stopped as a result of the drop in blood pressure at the time of operation, making it difficult to site. These may however recur if subsequent plugging by the blood clots is dislodged. Patients are therefore more likely to survive if a definite bleeding point was identified at operation than if one was not (3).

The presentation and clinical progression of spontaneous haemoperitoneum frequently follows a rather predictable course. In the series reported by Sanders *et al*, initial symptom was ill-defined abdominal pain in 46 out of 51 patients. But cases have occurred in which dyspnoea, chest pain, collapse and vomiting were the presenting complaints (3). Hassani *et al* however divided the presentation of acute haemoperitoneum into three main phases: an early phase of mild-to-severe abdominal pain, a latent phase lacking any symptomatology, lasting from hours to days and a final phase of acute haemoperitoneum in which the patient experiences a rapid increase in the severity of the symptoms, especially the abdominal pain (2).

Keys to successful management will include obtaining a detailed history based on sound knowledge of both common and infrequent etiologies, high index of suspicion, and early operative intervention plus blood replacement therapy. Suspicion not confirmed with physical exam and laboratory evaluation alone can be diagnosed definitively with four quadrant tap or diagnostic peritoneal lavage (4). CT and ultrasonography though less sensitive, could also be of help. In cases where a specific bleeding site is suspected, consideration should be given to angiography, which can be both diagnostic and therapeutic (5).

Conservative management has a high mortality rate. Treatment, as with other bleeding phenomena, revolves around resuscitation and restoration of circulating volume. This is then followed by surgical correction. The surgical management consists of resection of the aneurysm, ligation of the feeding vessels or some forms of arterial reconstruction (6). Radiological intervention with embolisation of the feeding vessel is an option in splanchnic aneurysms where such services are available. However, a review of the literature revealed that simple ligation of vessels with or without resections is the preferred option (2).

It is interesting therefore that our patient, probably supported by young age, had such an uneventful outcome and quick return to routines after exploration and blood transfusion for spontaneous idiopathic haemoperitoneum.

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