Co-Existing Tubal Ectopic Pregnancy and Appendicitis – A Case Report

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Summary

Appendicitis in pregnancy has a well documented high morbidity due to the difficulty in diagnosis. However, synchronous ectopic pregnancy and appendicitis is a rare event. This report describes the case of a 22-year-old lady of Bangladeshi origin who presented with both these conditions. The importance of prompt diagnosis and early surgical intervention, the inherent difficulties in diagnosis and the possible interrelated aetiological factors are discussed.

Key Words: Ectopic pregnancy, Appendicitis

Introduction

Acute appendicitis in pregnancy is a rare event. An incidence of 0.17% had been reported[1]. It is well documented in the medical literature that appendicitis in pregnancy has a high morbidity, both for the mother and the foetus. This is mainly due to difficulties in diagnosis[1-2]. However, synchronous tubal ectopic pregnancy and appendicitis is a rare event[3,4,5,6] with only one reported case of abdominal pregnancy and appendicitis[7].

Case Report

A 22-year-old woman, para 1+0, of Bangladeshi origin presented with a three-day history of lower abdominal pain. This was of gradual onset which started in the umbilical region and radiated to the right iliac fossa. There were no associated bowel or urinary symptoms. Her last normal period was 5 weeks previously. Her periods were regular, occurring every 28 days and each lasting 7 days. In the past, she had a full term normal delivery of a female infant. She has been trying to conceive for 8 months and had previously used the combined oral contraceptive pill. There were no significant past medical or surgical history.

On physical examination, her oral temperature was 38 degrees Celsius and her pulse was 96 per minute. She was normotensive and the chest was clear. There was minimal guarding and rebound tenderness in the right lower quadrant of her abdomen which was otherwise soft with normal bowel sounds. A vaginal examination revealed cervical excitation and right adnexal tenderness but no palpable masses.

Investigations included a negative urinalysis and a positive urinary pregnancy test (clear view beta-HCG). The full blood count showed a haemoglobin of 10.1 grammes per decilitre and a leucocytosis of 20.7 per nanolitre with a platelet count of 360 per nanolitre. The serum electrolytes were within normal limits as was the serum amylase level. A trans-vaginal ultrasound scan showed no intrauterine pregnancy or adnexal masses.

A laparoscopy was performed and an unruptured left tubal ectopic pregnancy measuring 1.5 x 1.0 centimetre was apparent at the ampullary region, which was adherent to the left ovary and descending colon. 200 millilitres of haemoperitoneum was noted. The decision was then made to proceed to a

laparotomy. A left linear salpingostomy was performed to remove the ectopic pregnancy. Following this, inspection of the appendix revealed that it was acutely inflamed and therefore a routine appendicectomy was performed.

Post-operative recovery was unremarkable. She continued on antibiotics for 5 days and was discharged well five days after her admission.

The histo-pathological examination reported a heavily congested vermiform appendix which measured 6 x 1 centimetres. Microscopically, the appendix showed congested vessels and acute inflammation (Fig. 1). The tubal contents showed brownish tissue measuring 1.5 centimetre in diameter. The appearances microscopically was consistent with a blood clot containing chorionic villi and trophoblast in keeping with an ectopic pregnancy (Fig. 2).

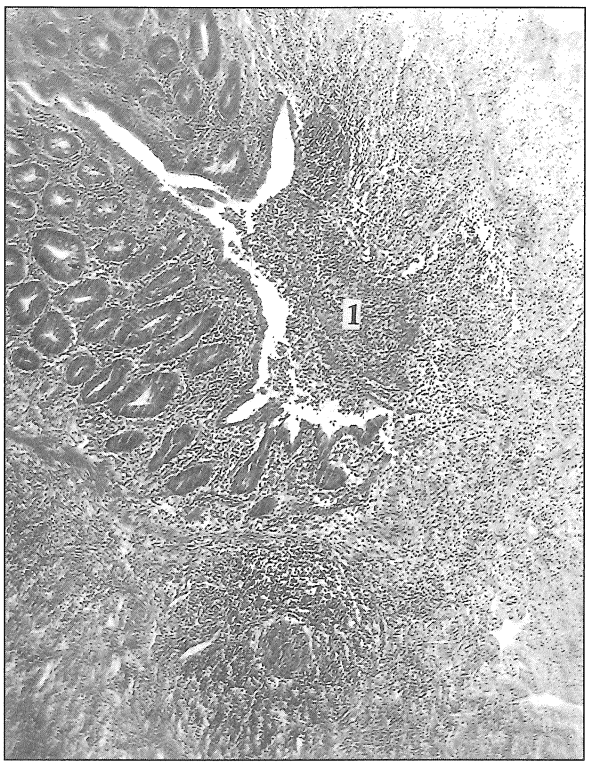

Fig. 1: 1) Acute ulcerative inflammation of the mucosa

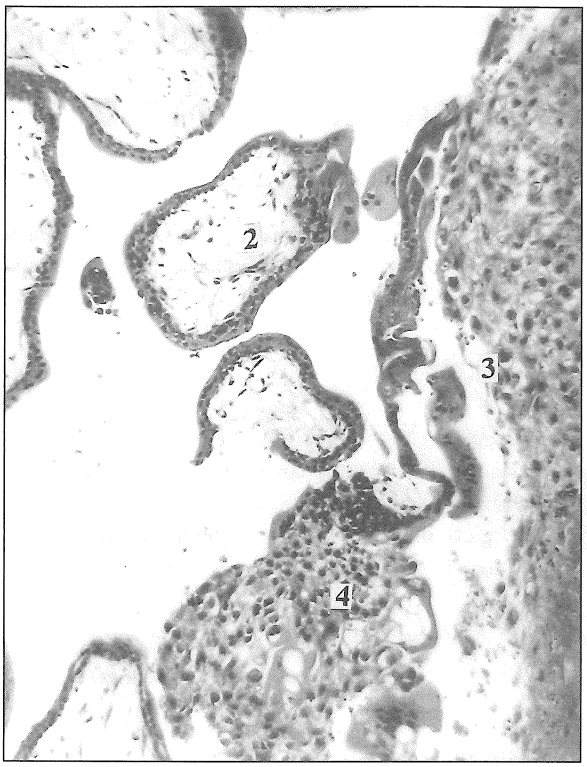

Fig. 2: 2) Chorionic villi, 3) Decidual reaction 4) Trophoblast

Discussion

The clinical presentation and investigations in this case were more suggestive of acute appendicitis. Indeed, the finding of an ectopic pregnancy was unexpected. Despite the rarity of simultaneous ectopic pregnancy and acute appendicitis, it has been emphasised that a careful exploration of the abdomen should always be performed even when the cause of the patient's symptoms is obvious[4]. Theoretically, the unusual co-existence of an ectopic pregnancy and acute appendicitis may be coincidental. However, it has been suggested that ectopic pregnancy can be an occasional aetiological factor for inflammation of the appendix. Pelosi *et al*[5] suggested the possibility of an ectopic pregnancy producing an inflammatory response of the appendix, producing a periappendicitis and eventually resulting in the inflammation of the entire appendix. Conversely, appendicitis can also be an aetiological factor for ectopic pregnancy[6]. Indeed, a direct relationship between the two conditions remains unproven.

Interestingly, the majority of cases reported involved a right-sided ectopic pregnancy[3,6,7]. Periappendicitis was the predominant feature on histological examination of the appendix, probably as a result of contact with the ectopic or free blood[3,5,7]. This may well progress to transmural inflammation. An interesting feature of our case is that histological examination of the appendix revealed a predominantly mucosal inflammatory process with minimal serosal inflammation (Fig. 1). Furthermore, this was a left sided ectopic pregnancy with the appendix situated at the right pelvic brim. Therefore, this is a unique case of two unrelated pathological processes occurring in the same individual.

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Supernumerary chromosomes in mosaic Turner Syndrome

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Summary

The finding of a supernumerary or marker chromosome in a karyotype poses difficulty in genetic counselling. The true incidence and significance of this chromosomal aberration is unknown in Malaysia. We report two patients who presented with supernumerary chromosomes in mosaic Turner syndrome.

Key Words: Mosaicism, Supernumerary chromosome, Turner syndrome, Medical genetics