



SPONTANEOUS CAECA PERFORATION IN PREGNANT FEMALE: A RARE CASE REPORT

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ABSTRACT

Caecal perforations are rare to occur spontaneously than colonic perforation. Due to physiologic changes and limitations on several diagnostic imaging modalities, preoperative diagnosis of the caecal perforation is particularly challenging in pregnant women.

KEYWORDS : Caecal perforations, Right Hemicolectomy

INTRODUCTION

Ectopic pregnancy, peduncular torsion of an ovarian cyst, ovarian haemorrhage, and pelvic inflammation are some of the pregnancy-related causes of acute abdomen. However, conditions including acute appendicitis, ileus, and cholecystitis may also be to blame¹. A sudden colonic perforation that occurs in the absence of any other disease or damage is known as spontaneous perforation of the colon. Less than 100 cases have so far been documented in the literature². Spontaneous caecal perforation is a fairly unusual occurrence because more than 60% of these perforations take place in the sigmoid colon.^{3,4} The treatment of a caecal perforation in a pregnant patient is quite difficult, especially when deciding which surgical approach to use (right hemicolectomy vs. primary repair + omental patch).³

CASE REPORT

A 22 year old 6 months pregnant female came to emergency department with complain of abdominal pain, more in right iliac fossa since 13-14 days and fever since 2 days, with history of chronic constipation for last 2 years. She had no urinary symptoms, and she reported feeling active fetal movements. On general physical examination, the patient was conscious, oriented and had the following parameters: blood pressure 104/55 mmHg, pulse 116 beats/minute, respiratory rate 22 breaths/minute, and body temperature 38.7 °C. Patient on examination per abdominally showed generalised tenderness present over abdomen with distention. On digital rectal examination, her pouch of Douglas was extremely tender, and faecal staining on gloves. Routine blood investigations were normal. Abdominal ultrasonography revealed a viable, 21-week gestational age intrauterine monofetal pregnancy and free fluid with internal echoes, Xray abdomen shows air under diaphragm. Preoperative resuscitation was initiated with the use of crystalloids. A nasogastric tube and urinary catheter were inserted. Patient was planned for emergency laparotomy, intraoperatively there were adhesions and around 600cc of feco-purulent fluid present in right iliac fossa. A 1x1 cm perforation was present at the caecum. Right hemicolectomy with end ileostomy was done which showed presence of large 13 cms appendix. On day 3 of post-operative period patient experienced spontaneous delivered premature baby of 800gmb by normal vaginal delivery.

DISCUSSION

Spontaneous colonic perforations are rare, and caecal perforations even more so.⁵ Preoperative diagnosis of the caecal perforation in a pregnant woman is difficult because of restriction of diagnostic imaging². One of the anatomical regions of the colonic vasculature that is particularly vulnerable is the ileocecal region, together with the splenic flexure (Griffiths point) and the rectosigmoid region (Sudeck point).² The cecum has a thinner wall than other parts of the colon and a larger diameter, which allows it to expand three times more than other parts of the colon, making it more prone to perforation. Modern medical assessment has grown to rely heavily on radiologic diagnostic techniques. In all stages of pregnancy, exposure to X-rays to the growing baby is undesirable, but the first trimester is when it has the greatest teratogenic effects.⁶ Due to its low cost, noninvasive nature for both mother and foetus, and the wealth of data that can be gathered through this straightforward operation, ultrasonography is the preferred method for diagnosing an acute abdomen in pregnancy.⁷ In order to diagnose an acute abdomen in pregnancy, an abdominal examination is still of the utmost importance. Caecal dilation depends on a functioning ileocecal valve to stop the proximal colon and cecum from decompressing retrogradely. If the cecum is more than 12 cm dilated, the risk of perforation increases.⁸ Caecal perforation is related with mortality rates between 30% to 72%.⁹ The course of spontaneous colonic perforations is influenced by the peritoneal contamination level, the timing of surgical intervention, and the effectiveness of the treatment.²

CONCLUSION

Spontaneous caecal perforation is rare entity and even more so in the pregnant females. Early diagnosis of caecal perforation is very difficult in pregnant females because of more reliance is on clinical examination and ultrasonography findings as X-rays and CT scan cant be done in pregnant females. However, key to the better management of the patient is prompt surgical intervention as soon as diagnosis had been made.

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