# ACUTE GASTRIC DILATATION COMPLICATING TERM PREGNANCY: A CASE REPORT

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#### SUMMARY

We report an unusual case of acute gastric dilatation of uncertain etiology in a patient with term pregnancy. To the best of our knowledge this is the first report of acute gastric dilatation complicating term pregnancy. Such a possibility should be kept in mind in a pregnant patient who has constant, unrelenting pain. Careful nasogastric decompression in such a case may prevent laparatomy if all other laboratory, physical, and radiological findings are unrevealing.

Key words: acute gastric dilatation, pregnancy

### ÖZET

#### Term Gebeliği Komplike Eden Akut Gastrik Dilatasyon: Bir Olgu Sunumu

Bu çalışmada term gebeliği olan bir hastada sebebi belirsiz olarak gelişen sıradışı bir akut gastrik dilatasyon olgusunu sunmaktayız. Literatürde yaptığımız araştırmaya göre, term gebeliği komplike eden ilk akut gastrik dilatasyon vakası sunulmaktadır. Böyle bir olasılık sürekli ve geçmeyen ağrı şikayeti olan gebe bir hasta söz konusu olduğunda akılda tutulmalıdır. Laboratuar, fizik muayene ve radyolojik bulgular sonuç vermediği takdirde böyle bir vakada dikkatli nazogastrik sonda uygulanması, laparatomi yapılmasını engelleyebilir.

Anahtar kelimeler: akut gastrik dilatasyon, gebelik

#### **INTRODUCTION**

First described in early 19th century, acute gastric dilatation has since been well documented in the literature. Several theories of the pathogenesis of acute gastric dilatation have been postulated, among which the earliest one is the superior mesenteric artery syndrome, followed by the atonic theory. Later on, debilitation and anesthesia were introduced as predisposing factors<sup>(1)</sup>.

Acute dilatation probably is a variety of segmental ileus **where** inhibition of an intrinsic motor pacemaker has experimental support as the etiology<sup>(2)</sup>. There are reports of acute gastric dilatation in blumic, anorexic patients, following multiple traumas, in peritonitis, upper gastrointestinal endoscopy, and in acute pancreatitis<sup>(3)</sup>. Symptoms of acute dilatation can be **non-specific**. Patients may have hiccups, complain of heartburn or symptoms may be more severe as to

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mimic angina pectoris, myocardial infarction, or pulmonary embolus. T-wave abnormalities in the electrocardiogram

have been reported in gastric dilatation<sup>(4)</sup>.

We report an unusual case of acute gastric dilatation of uncertain etiology in a patient with term pregnancy. To the best of our knowledge this is the first report of acute gastric dilatation complicating term pregnancy.

#### CASE REPORT

33 year-old gravida 5, para 1 patient who had a term pregnancy of 40 weeks and 3 days, presented to our clinic complaining of unrelenting pain on the epigastric and left costa-vertebral region. Her constant pain had commenced at noon and she had it for two and a half hours before she made it to our hospital. On admission, the patient was thought to have labor pain, however, neither tococardiograph, nor physical examination revealed uterine contractions, and no cervical dilatation or effacement was noted. Thorough physical examination of all systems and laboratory values were within normal limits while the patient was experiencing relentless, severe and constant pain. Laboratory values were as follows: Hb: 12 g/dL, leucocyte count: 11,500/mm<sup>3</sup>, platelet count: 250,000/mm<sup>3</sup>, AST: 15 U/L, ALT: 16 U/L, BUN: 12 mg/dL, creatinine: 1 mg/dL, serum amylase: 70 U/L. Her body temperature was 36.20C, and she had a blood pressure of 130/70 mmHg. In spite of severe pain, she did not have parallel abdominal guarding or rebound. She had no complaints of fever, hematemesis, or diarrhea and no urinary or gynecologic symptoms. Because of her uterus at term elevated over the umbilicus, any abdominal pathologies were hard to evaluate or locate. Abdominal USG revealed nothing out of the ordinary; her lung auscultatory findings were normal. We were reluctant for direct abdominal X-Ray, or Computerized Tomographic scans with iv opaque contrast media injections. As there were no positive physical, laboratory or radiological findings, a nasogastric tube was placed, which did not show any blood or fecal material. 75 mg of im Pethidine HCl relieved her pain for the following half an hour. Nevertheless, as her pain recurred even more severely, we decided to perform a laparotomy with a midline incision. After delivering the baby via cesarean section,

an exploration was made and massive gastric dilatation was observed and decompressed with massage and larger diameter nasogastric suction. Bowel segments were normal along with all other intra-abdominal structures. The patient was well after the operation, commenced and tolerated oral feeding. Her nasogastric tube was taken out on post-operative day one and she was discharged without any complaints on postoperative day three. **The baby was also healthy,** weighed 3750 grams and had no medical problems.

#### DISCUSSION

Acute gastric dilatation is a postoperative complication familiar to most surgeons; there are also reports after heavy meal consumption. However, acute gastric dilatation has never been reported complicating term pregnancy. If not diagnosed and treated early, massive dilatation may even result in death of the patient secondary to necrosis and rupture, which is a very rare  $event^{(5,6)}$ . Complications associated with acute gastric dilatation include pulmonary aspiration, gastric hemorrhage, gastrointestinal perforation, and prolonged  $ileus^{(4,7)}$ . Although rare, gastric necrosis is the most severe consequence of acute gastric dilatation. Often gastric dilatation can be treated with nasogastric decompression, however with delay in diagnosis and treatment, if this condition progresses, the stomach loses its contractility, resulting in venous occlusion, infarction, and gastric perforation. An extensive operation is required, and the patient undergoes an often complicated and prolonged hospital  $course^{(3)}$ .

Pain is the most prominent symptom encountered with acute abdominal conditions that complicate pregnancy. When there is upper abdominal pain it is often related to the liver, gallbladder, spleen, stomach, duodenum, or pancreas. Hence, in the differential diagnosis of our patient's condition acute cholecystitis, acute pancreatitis, and perforated gastric or duodenal ulcer were all considered, however there were no supporting laboratory or radiological findings. Spontaneous hepatic or splenic rupture is also possible. Splenic artery aneurysm occurs in 0.1-1 % of adults and it is estimated that 10% of lesions will rupture. However, 25 to 40% of ruptures occur during gestation, especially in the third trimester; and when a pregnant woman develops ruptured splenic artery aneurysm the mortality rate is 75%.

Gastric dilatation can be a major problem, difficult to diagnose in a pregnant patient in late gestational weeks. Actually, to the best of our knowledge, this is the first report of such diagnosis concurrent with pregnancy. Possibility of acute gastric dilatation should be kept in mind in a pregnant patient who has constant, unrelenting pain. Careful nasogastric decompression in such a case may prevent laparatomy if all other laboratory, physical, and radiological findings are unrevealing.

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