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## Case Report

# Acute pancreatitis in pregnancy: a case report

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### ABSTRACT

Acute pancreatitis is a rare event, can be associated with a high maternal mortality and fetal loss with an incidence of 3 in 10,000 pregnancies. A 24 years old primigravida with 28 weeks of gestation, presented with pain in upper abdomen since 4 days and nausea, vomiting and fever since two days, abdomen distended and tenderness present in epigastric region. Serum amylase and lipase were raised. Sonography abdomen showed pancreas bulky with peripancreatic free fluid and inflammatory changes suggestive of pancreatitis. Patient was managed conservatively and was discharged to home after 7 days. Regular follow up was done till 36 weeks and emergency cesarean delivery was done in view of non-reassuring fetal heart rate at 36 weeks 3 days of gestation. Early diagnosis of acute pancreatitis in pregnancy and supportive treatment with maternal and fetal monitoring results in good perinatal outcome. The treatment of pancreatitis in pregnancy should be conservative as far as possible with delaying the definitive treatment until delivery of the baby.

**Keywords:** Conservative management, Epigastric pain, Pancreatitis, Serum lipase

### INTRODUCTION

Acute pancreatitis is a rare event, can be associated with a high maternal mortality and fetal loss. It has an incidence of 3 in 10,000 pregnancies. Gall stone disease is thought to be main culprit. Acute pancreatitis is triggered by activation of pancreatic trypsinogen followed by auto-digestion which leads to cellular disruption, proteolysis, edema, hemorrhage and necrosis. Acute pancreatitis in pregnancy needs greater concerns as we deal with two lives rather than just one as in non-pregnant patient.<sup>1</sup>

### CASE REPORT

A 24 years old woman, primigravida with 28 weeks of gestation, known case of gestational diabetes mellitus presented with pain in upper abdomen since 4 days and nausea, vomiting and fever since two days. On clinical examination, patient was febrile to touch, pulse rate 120 per minute and blood pressure 100/56 mm Hg, chest was

clear on auscultation but respiratory rate was 24 per minute, abdomen distended and tenderness present in epigastric region, uterus was 28 weeks and relaxed, fetal heart rate present and regular.

Laboratory findings revealed hemoglobin 12.3 g/dl, TLC-18,300 cells/cubic mm, blood urea-27 mg/dl, serum creatinine-0.6 mg/dl, bilirubin total-1.23 mg/dl, SGOT-29 IU/l, SGPT-43 IU/l, serum alkaline phosphatase-126 IU/l, serum calcium-8.2 meq/dl, serum amylase-471 IU/l and serum lipase-882 IU/l. Sonography abdomen showed pancreas bulky with peripancreatic free fluid and inflammatory changes suggestive of pancreatitis.

### *Treatment and outcome*

Patient was admitted in labour room, kept nil orally and nasogastric tube put in situ, hydration maintained by intravenous fluids, analgesics, antipyretics and antibiotics were given. A regular fetal and maternal vital monitoring

was started with input and output charting. Patient started to recover and became asymptomatic after 4 days and discharged to home after 7 days. Regular follow up was done till 36 weeks and emergency cesarean delivery was done in view of non-reassuring fetal heart rate at 36 weeks 3 days of gestation. Baby was healthy with APGAR score more than 7 and birth weight of 2.5 kgs.

## DISCUSSION

Pancreatitis can occur during any trimester but around 52% of cases are found in the third trimester.<sup>2</sup> Gallstones are the most common etiological factor. The relaxant effect of progesterone in pregnancy leading to atony of the biliary tract, bile stasis in the duodenum and reflux may be a contributing factor. Hyperlipidaemia is the second most common causative agent. Pregnancy increases the level of serum cholesterol and triglycerides and causes biliary stasis thus inducing the formation of gallstones. Hypertriglyceridemia may also directly cause acute pancreatitis. Clinically, acute pancreatitis is characterized by pain and tenderness in the epigastrium associated with nausea, vomiting and abdominal distension. The biochemical investigations required to establish a diagnosis of acute pancreatitis include complete blood count, serum triglycerides, Calcium and liver function tests. An elevated serum amylase level has a diagnostic sensitivity of 81% and adding serum lipase increases the sensitivity to 94%.<sup>2</sup> However, amylase levels do not correlate with disease severity. Medical management includes hospitalization, analgesics, antipyretics, intravenous hydration, measures to decrease

pancreatic secretion by interdiction of oral intake and fetal monitoring.

## CONCLUSION

Early diagnosis of acute pancreatitis in pregnancy and supportive treatment with maternal and fetal monitoring results in good perinatal outcome. The treatment of pancreatitis in pregnancy should be conservative as far as possible with delaying the definitive treatment until delivery of the baby.

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