

# Acute Pancreatitis in Pregnancy – Successful Outcome

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**Abstract:** *Acute pancreatitis in pregnancy is rare .The spectrum of Acute pancreatitis in pregnancy ranges from mild pancreatitis to serious pancreatitis associated with necrosis, abscesses ,pseudocysts & multi organ dysfunction syndromes . We do report a case of Acute pancreatitis in a 21 year old primigravida at 35 weeks of gestation. She presented to us with hypertension , pedal edema, epigastric pain & vomiting . Investigations revealed hyperamylassemia & gall bladder sludge .She underwent lower segment caesarean section .She was stabilized in ICU for three days .Both mother & baby were discharged after one week .*

**Keywords:** Pregnancy, acute pancreatitis, serum amylase , ultrasonography

## 1. Introduction

Acute pancreatitis is rare and serious complication during pregnancy, estimated to occur in 1/1000 to 1/12000 pregnancies [1]. The most frequent etiology of acute pancreatitis in pregnancy is biliary caused by gall stones or sludge [7]. Other causes are hyperlipidemia and alcohol abuse .The recent advances in clinical gastroenterology have improved the early diagnosis and effective management of biliary pancreatitis [5]. Abdominal ultrasonography and endoscopic ultrasonography are ideal imaging techniques in pregnancy for diagnosing the disease because they have no radiation risk .Prompt diagnosis and treatment could reduce maternal and fetal morbidity and mortality [2].

## 2. Case Report

Mrs C , 21 years old , primigravida with 35 weeks of gestation presented with history of epigastric pain radiating to back of two days duration . It was associated with vomiting. She gives history of hypertension from the past two weeks and on oral medication with labetalol .Her past history was uneventful and there was no history suggestive of jaundice or gall stones . On examination, she was moderately built and nourished .She had mild pallor and there was no jaundice .Was severely dehydrated with pulse rate of 130/ minute. Her blood pressure was 130/90 mmHg.

Per abdomen examination revealed uterus corresponding to 34 weeks of gestation. There was tenderness all over the abdomen. The fetal heart sounds was 152-166 / minute. Abdominal USG indicated free fluid in the left upper quadrant and pregnancy corresponding to 34 weeks of gestation. On CT scan , the gall bladder was normal with no abnormal wall thickening . There was no radiodense calculi .Pancreas was diffusely enlarged in size . Significant large

amount of fluid collection noted along the anterior pararenal space with minimal extension in the perigastric foramen of Winslow and perisplenic regions. Significant fluid collection was also noted extending along bilateral paracolic gutters upto the pelvis. Pancreatic outline was hazy and extensive peripancreatic fat stranding was noted .The probable diagnosis was Acute pancreatitis with pregnancy . The other investigations were as follows:

Hb: 11.6 gm % TC 16,700 cells / cu mm. Coagulation profile was normal . Urine examination revealed ketone bodies large . S. Amylase 581 units .S.Lipase 881 units .

As our neonatal intensive care unit is equipped to manage neonates above 34 weeks of gestation , the decision was taken to do Emergency Caesarean section .

With ASA Grade III risk, emergency LSCS was done . About 2 litres of straw coloured ascitic fluid drained .A live male baby was extracted weighing 2.4 kgs and was shifted to NICU. There was no complication during caesarean section. She was stabilised in ICU for three days .She was treated with parenteral Octreotide which is a synthetic version of naturally occurring somatostatin to inhibit exocrine pancreatic secretion . As she became haemodynamically stable she was shifted from ICU to the ward . Both mother and baby were discharged after 8 days .She was put on pancreatin, a digestive enzyme for 1 month for pancreatic insufficiency .She came for follow up after two weeks. Both mother and baby were fine.

## 3. Discussion

Acute pancreatitis in pregnancy remains a challenging clinical problem to manage, with a relatively limited but expanding evidence base [5]. Acute pancreatitis during

pregnancy is a rare event, and can be associated with maternal mortality and fetal loss [3]. The most frequent etiology of acute pancreatitis in pregnancy is biliary caused by gall stones or sludge [7]. Other causes are hyperlipidemia and alcohol abuse [1]. Lipids and lipoproteins ( including triglycerides ) levels are increased during pregnancy, which increases three fold peak in the third trimester [5].

Signs and symptoms of acute pancreatitis usually include midepigastic pain, left upper quadrant pain radiating to left flank, anorexia, nausea, vomiting, decreased bowel sounds, low grade fever, and associated pulmonary findings 10% of the time (unknown cause) [5]. Imaging of the pancreas can be performed by using ultrasound and computed tomography [5].

Abdominal ultrasound, computed tomography (CT), endoscopic ultrasound and magnetic resonance cholangiopancreatography (MRCP) are available for diagnosing a biliary etiology for acute pancreatitis. [3] Diagnostic endoscopic cholangiopancreatography (ERCP) is to be avoided whenever possible owing to the associated risks including bleeding, perforation, fetal radiation, while abdominal ultrasound, MRCP and EUS do not carry these risks [5].

Diagnostic blood tests for AP include serum amylase and lipase, as well as triglycerides levels, calcium levels, and a complete blood count [5]. Amylase levels in pregnancy range from 10-160 IU/L in some labs [5]. These values vary depending on each laboratory. Lipase, another enzyme produced by the pancreas, has norms ranging from 4-208 IU/L (these also vary depending on laboratory) [5].

Conservative medical management of pancreatitis includes intravenous fluids, nasogastric suctioning, bowel rest, use of analgesics and antispasmodics, fat restriction with parenteral nutrition, and antibiotics [5]. However surgical treatment could be considered under certain circumstances, such as pancreatic enlargement and necrosis, gastrointestinal perforation or no improvement after 2-3 days of conservative management [2].

The timing of pregnancy termination for patients with severe acute pancreatitis (SAP) has long been an issue for obstetricians. Indications for pregnancy termination include full-term gestation, deteriorated condition after 24-48 hours of treatment, no improvement of paralytic ileus, still birth, fetal malformation, and severe pancreatitis. <sup>(2)</sup>Caesarean section is still the preferred method for pregnancy termination [2].

#### 4. Conclusion

Acute pancreatitis in pregnancy remains a challenging clinical problem to manage. <sup>(5)</sup>Early diagnosis and classification of severity of acute pancreatitis at presentation is an essential step for successful management in patients suffering from acute abdominal pain during pregnancy [2]. The outcome of pregnant patients with acute pancreatitis has substantially improved with technical advances in imaging and therapeutic endoscopy [5].

A multidisciplinary team consisting of gastroenterologist, gastrointestinal surgeon, radiologist and obstetrician should be included in the treatment of acute pancreatitis in pregnancy.

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