Pancreatitis in Pregnancy - A Case Report

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Abstract: ***Acute or chronic pancreatitis during pregnancy is a rare event and can be associated with high maternal mortality and fetal loss. We report a case of a 24 years Primi gravida at 21 weeks & 28 weeks of gestation, who presented twice with severe pain confined to the upper abdomen and radiating to the back and vomiting. The patient was diagnosed with acute pancreatitis, which was managed conservatively.***

Keywords: Pancreatitis, epigastric pain, serum lipase, conservative management

1. Introduction

Affects approximately 1 in 10,000 individuals & frequency of the disorder doesn't change in pregnancy. 10% of pregnant women develop stones or sludge & 4% maintain them to postpartum period. Cholelithiasis is thought to be the most common causative factor of acute pancreatitis, but, in many cases, the cause remains unclear. Affects approximately 1 in 10,000 individuals and frequency of the disorder doesn't change in pregnancy.

Inflammation triggered by factors that cause activation of pancreatic trypsinogen followed by autodigestion. Pathogenesis is by cell-membrane disruption, proteolysis (proteases), edema, haemorrhage (elastase) and fat Necrosis (lipases, phospholipases).

Causes are cholelithiasis (MC), hyperlipidemias, viral infections (HIV /EBV /Mumps /Coxsackie /CMV / Varicella / Hep A & C), hyperparathyroidism, congenital duct anomalies, ERCP, alcohol abuse, drug-induced, autoimmune, Non-biliary, trauma, Acute fatty liver of pregnancy and CFTCR gene mutations.

Symptoms & Signs are severe epigastric pain–radiating to back, 'fetal position' – flexed knees, hips & trunk, nausea, vomiting, fever, diffuse abdominal tenderness, tachycardia, bowel sounds hypoactive- due to ileus.

Investigations include – Biochemical - Leucocytosis, S.Amylase - >100 U/100 ml, S.Lipase - > 200 U/100 ml, Triglycerides - > 1000 mg/dl, LFT – elevated T.Bilirubin (>1.3), AST (>35) & LDH , Amylase-creatinine clearance ratio, $S.Ca^{2+}$, $S.K^{+}$, $S.Mg^{2+}$ - reduced, Blood Sugars elevated & CRP is elevated. Radiological - Ultrasound abdomen & MRCP.

Differential diagnosis to be ruled out are duodenal ulcer perforation, acute cholecystitis, acute hepatitis, small bowel obstruction, mesenteric ischemia, diabetic ketoacidosis and pre-eclampsia.

2. Case Report

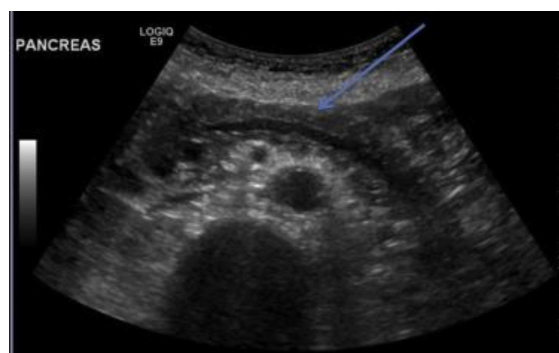
A 24 yrs old Mrs.Sowmiya, primigravida of gestational age 21 weeks & 3 days had come to our OPD with complaints of severe epigastric pain for a day which was colicky, radiating to back , vomiting - 2 episodes that day, non projectile, contains food particles not bile or bloodstained. She was able to perceive fetal movements well**.** Patient gives history of similar complaints in the past few years but didn't get it evaluated.

On examination:

a) GC – fair , afebrile
b) Not anaemic
c) Thyroid, breast, spine – NAD
d) Vital signs – stable
e) CVS – S1, S2 heard, no added murmurs.
f) RS – B/L NVBS heard, no added sounds.
g) P/A : Uterus corresponding to 20 weeks
   - Fetal parts (+)
   - Tenderness (+) over epigastric region
   - No gaurding / rigidity
   - Bowel sounds heard

3. Investigations

S.Amylase	1220 IU/ml	⇧
S.Lipase	2220 IU/ml	⇧
WBCs	10180 cells	⇧
TGL	210 mgs/dl	⇧
Ca^{2+}	7.1 mgs/dl	⇩



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USG shows main pancreatic duct dilatation of 5-6 cms & cholelithiasis.

4. Discussion

Treatment given was hydration with IV fluids, anti-emetics and antacids. Her biochemical values became normal and her symptoms also subsided eventually. She again came at 28 weeks with similar complaints and treated. Medical gastro- enterologist opinion obtained – to continue the same treatment. Both times she was managed conservatively & delivered a healthy baby.

5. Conclusion

Since acute pancreatitis can be fatal, early diagnosis will help in better maternal and fetal outcome. Therefore it is important to consider acute pancreatitis when a pregnant woman presents with upper abdominal pain, nausea and vomiting in order to improve fetal and maternal outcomes for patients with acute pancreatitis. Therefore, it is important to have multi- disciplinary approach involving the obstetrician, surgeon, gastroenterologist, and radiologist

References

[1] Nanda S, Gupta A, Dora A, Gupta A. Acute pancreatitis: a rare cause of acute abdomen in pregnancy. Arch Gynecol Obstet 2009 Apr;279(4):577-578.
[2] Wang GJ, Gao CF, Wei D, Wang C, Ding SQ. Acute pancreatitis: etiology and common pathogenesis. World J Gastroenterol 2009 Mar;15(12):1427-1430.
[3] Ko CW, Beresford SA, Schulte SJ, Matsumoto AM, Lee SP. Incidence, natural history, and risk factors for biliary sludge and stones during pregnancy. Hepatology 2005 Feb;41(2): 359-365.
[4] Qihui C, Xiping Z, Xianfeng D. Clinical study on acute pan- creatitis in pregnancy in 26 cases. Gastroenterol Res Pract 2012 Nov;2012(7):271925.
[5] Stimac D, Stimac T. Acute pancreatitis during pregnancy. Eur J Gastroenterol Hepatol, 2011 Oct;23(10):839-844.
[6] Juneja SK, Gupta S, Virk SS, Tandon P, Bindal V. Acute pancre- atitis in pregnancy: a treatment paradigm based on our hospital experience. Int J Appl Basic Med Res 2013 Jul-Dec;3(2):122-125.
[7] Fields K, Barkin J. Pancreatic disease. In: Gleicher N, editor. Principles and practice of medical therapy in pregnancy. Stamford (CT): Appleton and Lange; 1998. p. 1142-1147.
[8] Kim JY, Jung SH, Choi HW, Song DJ, Jeong CY, Lee DH, Whang IS. Acute idiopathic pancreatitis in pregnancy: a case study. World J Gastroenterol 2014 Nov;20(43):16364-16367.
[9] Sun Y, Fan C, Wang S. Clinical analysis of 16 patients with acute pancreatitis in the third trimester of pregnancy. Int J Clin Exp Pathol 2013 Jul;6(8):1696-1701.
[10] Jain V, Yegneswaran B, Pitchumoni CS. Biliary pancreatitis in pregnancy. Pract Gastroenterol 2009; 33:16-30.
[11] Gardner TB, Vege SS, Pearson RK, Chari ST. Fluid resuscita- tion in acute pancreatitis. Clin Gastroenterol Hepatol 2008 Oct; 6(10):1070-1076.
[12] Tenner S, Baillie J, DeWitt J, Vege SS. American College of Gas- troenterology guideline: management of acute pancreatitis. Am J Gastroenterol 2013 Sep;108(9):1400-1415.
[13] Esmer AÇ, Özsürmeli M, Kalelioğlu İ. Maternal and perinatal outcomes of acute pancreatitis during pregnancy. Gazi Med J.2012; 23: 133-137.
[14] Luminata S CMD; Erin T. Steidl DO; Manuel E. Rivera-Alsina, MD. Acute hyperlipidemic pancreatitis in pregnancy. Am J Obstet Gynecol 2008;e57-59.

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