FREQUENCY OF ACUTE PANCREATITIS IN PREGNANCY AND IT'S OUTCOMES

SHOAIB GANGAT, ANJUM REHMAN, MUHAMMAD AYUB, SAHER FATIMA, AMEER ALI, IQBAL AHMED MEMON
Department of Surgery, Unit II, Dow University of Health Sciences & Civil Hospital, Karachi

ABSTRACT
Objective: *To evaluate freguency of acute pancreatits in pregnancy and its associated maternal and foetal complications.*
Study Design: *Case Series.*
Setting & Duration: *Department of Surgery, Unit III, Civil Hospital, Karachi from June 2001 to January 2008.*
Methodology: *All pregnant females referred with suspicion of acute pancreatits were included and were further reviewed for maternal and foetal outcomes.*
Result: *The frequency of acute pancreatits in pregnancy was 7.83%, the most commonly presenting symptom was epigastric pain and tenderness while biliary pancreatits was the most common aetiology seen in 61.53% of cases. The recurrence rate during the same pregnancy was 15.38% while the total number of maternal deaths were 4(30.76%) and 9(69.23%) patients suffered severe morbidities. A total of 6(46.15%) fetuses suffered morbidities while their were six (46.15%) mortalities.*
Conclusion: *Acute pancreatits in pregnancy though a rare but a dreaded conditon. The associated maternal and foetal complications can be reduced by early diagnosis and thus early referral for apprprite specialist care.*

KEYWORDS: *Pregnancy, Acute Pancreatits, Gallstones, Morbidity, Mortility*

INTRODUCTION

Acute pancreatits may not be a common complication during pregnancy but it is definitely a dreaded one as far as maternal and fetal mortality is concerned. Acute pancreatits during pregnancy is defined as a complication which occurs in the period between 10 months prior to parturitation upto 10 months postpartum.[1] Amongst the aetiological factors choleliathiasis is the commnest one implicated in pregnancy.[2,3] Clinical manifestation vary but upper central abdominal pain, sometimes radiating to the back or to either side associated with nausea and vomiting are the most frequent symptoms.[4] Incidence of acute pancreatits associated with pregnancy is 1 in 1000 to 1 in 4000 pregnancies as shown by Ramin.[5] The most sensitive and specific laboratory diagnostic test is serum amylase which should always be perfomed in suspected cases,[4] as early diagnosis and subsequent treatment improves the prognosis of this otherwise potentially ominous condition.

Correspondence:
Dr. Shoaib Gangat, Assistant Professor of Surgery, Unit II, Dow University of Health Sciences & Civil Hospital, Karachi.
Phones: 0300-8233973.
E-mail: anjum.rehman@hotmail.com

METHODOLOGY

This case series was conducted at Surgical Unit II Civil Hospital, Karachi from June 2001 to January 2008. All pregnant females or patients in the peurperium with suspicious symptoms were included in this study. These patients were further reviewed for their aetiology, risk factors, maternal as well fetal outcome and the treatment they received. The patients were diagnosed by the presence of epigastric pain with raised serum amylase and supported by ultrasonographic signs of acute pancreatits.

RESULTS

During the study period a total of 166 patients were diagnosed as having acute pancreatits out of which 13

were pregnant thus the frequency of acute pancreatits in pregnancy was 7.83% of the targeted population.

The mean age was 31 years SD, min 23 years and max 4 years. The mean gestational age was 29 weeks SD with the maximum number of cases presenting in their third trimester. Majority of patients (30.8%) had parity of 5 or more 2(14.5%) had positive family history. Fever, nausea and vomiting were present in 10(76.9%) each while 2(15.4%) were jaundiced, epigastric pain and tenderness were present in all patients. The most common aetiology was biliary pancreatits present in total 8(61.53%). One (7.7%) had a history of induced abortion followed by the symptoms of acute pancreatitis while in 5(38.46%) had only gallstones, 2(15.38%) had hyperlipedemia and 3(23%) had both hyperlipidemia and presence of gallstones. A total of 3(23.1%) had recurrence of pancreatits during the same pregnancy.

Among the patients with biliary pancreatits 2(15.38%) had recurrence after conservative treatment and underwent cholesystectomy. There were 4(30.76%) maternal deaths, while 9(69.23%) had severe morbidities not only because of presence of risks factors but especially due to misdiagnosis and late referral with complications like pulmonary edema in 2(15.4%), pulmonary embolism in 1(7.69%). Preterm labour was seen in 3(23.07%) while 1(7.7%) had pancreatic abcess and renal failure both. Total fetal mortalities and morbidities were 6(46.15%) each, while 4(30.76%) neonates needed intensive care.

DISCUSSION

The result from this study reflect the fndings of studies published by other authors that acute pancreatits is an ominous condition which is evidenced by a maternal mortality of 30%. This has however being contradicted by the figures in a study from Choy.[6] In this study maximum number of cases presented in the last trimester this correlates with the findings by Ramn.[5] Parity in this study the maximum group had a parity of five, which is similar to other studies conducted by Shantu Kumar.[7]

The mean age of the patients in the present study is similar to study by Javed Naeem.[4] In this study, the commonest etiology was biliary pancreatitis as was seen in the study conducted by Zahra[3] and William.[8] Hyperlipidemia was the cause in 38.4% of patients in this study which is similar to the finding of Choy.[6] Commonest symptoms was epigastric pain radiating posteriorly as was the one in studies by other authors.[4] In those with biliary pancreatitis recurrence was commoner in the same pregnancy which needed surgical intervention as was the case in the study by Maev.[9] In contrast to the findings of Alejando[10] i.e 4.7% maternal mortality in this study was 30.76% which is direct contrast yet similar to the study presented by Taj.[11] Perinatal mortality in the authors study was 46% which is significantly high compared to findings by others[5,10] This was most likely due to either misdiagnosis or delayed in diagnosid and therefore late referral.

Laproscopic cholecystectomy, if perfomed at an appropriate time reduces not only recurrence but both the maternal as well as the foetal mortality, a fact documented by the others[8,10,12] as well as this study.

CONCLUSION

Acute pancreatits is not a very common occurrence during pregnancy. Biliary causes are the most commonest yet non biliary causes are associated with poor prognosis. However, biliary disease is associated with a higher recurrence.

REFERENCES

1. Maringhini A, Lankisch M R, Zinsmeister A R, Melton L J, Dimagno E P. Acute Pancreatits in the Postpartum Period: A Population Based Cased Control Study. Mayo Clin Proc 2000; 75: 361-64.

2. Date R S, Kaushal M, Ramesh A. A review of the management of gallstone disease and its complications in pregnancy. Am J Surg 2008; 196(4): 599-608.

3. Zahra F, Waheed M, Bhutta A R, Ali S M, Ahmad N, Majid A.Contribution of biliary disease in the pathogenesis of acute pancreatits. Ann King Edward Med Coll 2004; 10(3): 271-2.

4. Qureshi J N, Memon A S, Memon S, Memon A H. Pattern of acute pancreatits. The Liauat University Hospital experience. J Liaquat Uni Med Health Sci 2006; 5(1): 28-32.

5. Ramin K D, Ramsey P S. Disease of the gall bladder and pancreas in pregnancy, Obstet Gynecol Clin North AM 2001; 28: 571-80.

6. Choy C M Y, Tam W H, Leung T N. Gestational hyperlipidaemic pancreatits. BJOG 2002; 19: 847-848.

7. Sahu S K, Raghuvanshi S, Bahl D V, Sachan P K. Acute Pancreatits in pregnancy. Internet Journ Surg 2007; 11(2).

8. Eddy J, Gideonson D, Song Y, Grobman W A, O' Halloran P. Pancreatitis in pregnancy obstetrics and gynecology 2008; 112(5): 1075-81.

9. Maev lV, Burkov S G, Kucheriavy lu A, Ovlashenko E I. Pancreatits in pregnant women. Klin Med (Mosk) 2008; 86: 23-9.

10. Maxims A H, Petro V, David C, Brooks S, Bank S, Stanley W, Tavakkolizadeh A A. J Gastrointest Surg 2007; 11: 1623-27.

11. Taj A, Ghafoor M T, Amer W, Imran M, Ziaullah Rasheed S. Mortality in patients with acute pancreatits, Pak J Gastroentrol 2002; 16(2): 35-8.

12. Rollins M D, Chan K J, Price R R. Laparoscopy for appendicitis and cholelithiasis during pregnancy A new standard of care. Surg Endosc 2004; 18: 237-41.