

# Asian Journal of Pharmaceutical and Health Sciences

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# Cirrhosis and pregnancy- a report of 2 cases

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#### ARTICLE HISTORY

Received: 04.12.2011

Accepted: 19.12.2011

Available online: 10.05.2012

### Keywords:

Cirrhosis, pregnancy, labor, Cesarean section

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#### ABSTRACT

Cirrhosis and pregnancy are a rare existence. A 35 year old G2P1L1 was admitted with 36 weeks of gestation and cirrhosis of the liver. The patient went into active labor the next day and emergency LSCS was done for fetal distress under GA. A live healthy female baby of 1.9kg was delivered. Her LFT was normal. HBsAg, HCV I and II were negative. Ultrasonography showed features suggestive of cirrhosis of the liver with portal hypertension, moderate congestive splenomegaly and moderate ascitis. Upper GI endoscopy showed portal hypertension with gastropathy.

Discussion: Complications are common in cirrhotic patients. Bleeding esophageal varices(18-32%), splenic artery aneurysm rupture(2.65%), hepatic decompensation (24%), hepatorenal syndrome, hemorrhagic daiathesis and maternal deaths(10.3-18%) are known to occur. Obstetric complications such as spontaneous abortion (30-40%), preterm labor (25%), fetal growth restrictions, perinatal deaths (18%) and hemorrhagic disease in the new born have been encountered.

#### INTRODUCTION

irrhosis and pregnancy are a rare existence. I am reporting two cases of cirrhosis in pregnancy.

#### Case 1

A 35 year old G2P1L1 with 36 weeks of gestation was admitted to the antenatal ward on 28/08/09. She was a known case of cirrhosis of the liver, diagnosed 2 years ago. On examination the patient was anemic, her pulse rate was 94 beats per minute and BP 130/80 mm of Hg. Cardiovascular, respiratory and nervous systems were normal. The uterus was 32-34 weeks size, relaxed with vertex presentation and FHR of 140 beats per minute. On 29/08/09 the patient went into active labor and emergency LSCS was done for fetal distress under GA. (Failed spinal anesthesia). A live female baby of 1.9kg was delivered with APGAR of 7/10 at 1 minute and 9/10 at 5 mins. Investigations: Hb 8.2gm%. HBsAg, HCV I and II were negative, APTT 27.3 sec (control 25.2 secs), Total bilirubin 1.5mg/dl, Direct bilirubin 1mg/dl, Indirect bilirubin 0.5mg/dl, Total proteins 7.2g/dl, S. Albumin 3.2g/dl, ALT 28 IU/L, AST 16 IU/L, PT 19 sec (control 14 secs) INR 1.5. Ultrasonography showed features suggestive of cirrhosis of the liver with portal hypertension, moderate congestive splenomegaly and moderate ascitis. Upper GI endoscopy showed portal hypertension with gastropathy. The patient had post operative wound infection which healed with daily dressings. She also developed post partum psychosis which was treated with olanzapine and valproic acid. She was discharged on the 19<sup>th</sup> post operative day with a satisfactory condition.

#### Case 2

A 25 year old primigravida was admitted to the labor room on 13/12/08 with a H/O 36 weeks of gestation and labor pains. She had been diagnosed as a case of cirrhosis of the liver prior to her pregnancy. On examination the patient was icteric. Her pulse rate was 98/min. and BP was 130/80 mm of Hg. Cardiovascular, respiratory and nervous systems were normal. The uterus was 34 weeks size, contracting once in 3-4 mins for 40 sec, with cephalic presentation and FHR of 130 beats per minute, irregular. PV examination revealed a fully dialated cervix with vertex at +2 station. Liquor was thickly stained with meconium. Forceps was applied and a live female baby of 2.05kg was delivered with an APGAR of 1/10 at 1 min and 3/10 at 5 mins. Baby died after three days of birth. Investigations: Hb 11gm/dl, PT 15.5 sec(control 13secs), INR 1.21, Total bilirubin-4mg/dl, Direct bilirubin 2.7mg%, Indirect bilirubin 1.3mg% S proteins-6.3 gm/dl, S Albumin-3.5 gm/dl, AST 14 IU/L, ALT 28 IU/L, HBsAg, and HCV-I & II negative. Ultrasonography showed features suggestive of cirrhosis, splenomegaly and ascitis. Upper GI endoscopy showed three grade II esophageal varies with mild portal hypertension and gastropathy. The patient was treated with Propranolol 20mg bd, antibiotics and analgesics. Postnatal period was uneventful.

### **DISCUSSION**

Cirrhotic patients have associated anovulation and subfertility. Those patients who do conceive are known to have maternal and fetal complications [1]. Only 45 cases of cirrhosis occur in every 100,000 women of reproductive age [2]. However

cirrhosis is not a contraindication to pregnancy. Bleeding esophageal varices (18-32%), splenic artery aneurysm rupture (2.65%), hepatic decompensation (24%), ascitis(15%) hepatorenal syndrome, hemorrhagic daiathesis, post partum hemorrhage(7-10%) and maternal deaths(10.3-18%) are known to occur.[2,3] Variceal bleeding is most common during the second trimester, occurring in approximately 20 to 45 percent of women with portal hypertension [1]. Among those with preexisting varices, up to 78% will have gastrointestinal bleeding during pregnancy, with mortality rate of 18% to 50%. [2] It is recommendable that women with cirrhosis who are planning to become pregnant should undergo an upper GI endoscopy [2]. Prophylactic banding at 15, 26 and 31 weeks of gestation has been described [4]. Sclerotherapy can also be used and may aid banding [5]. During labor bleeding from the varices can occur and hence, many experts advocate using elective caesarian section or instrumental delivery under extradural analgesia in order to decrease this risk [6,7,8]. Although transjugular intrahepatic portosystemic shunt (TIPS) placement is generally contraindicated during pregnancy because of the risk of radiation exposure to the fetus, it may be an appropriate rescue therapy for failed attempts to control variceal bleeding with band ligation or sclerotherapy [2]. Both our cases had esophageal varices, but did not have any bleeding from them. Hepatic decompensation has been described in all stages of pregnancy, but often occurs after episodes of variceal bleeding [2]. When fulminant hepatic failure occurs, the only treatment available may be emergent liver transplantation [3]. Obstetric complications such as spontaneous abortion (30-40%), preterm labor (25%-50%) [9], fetal growth restrictions, perinatal deaths (18%) and hemorrhagic disease in the new born have been encountered [2,3]. Gestational hypertension, placental abruption and uterovaginal hemorrhage are more common in patients with cirrhosis[3] Cesarean sections and peripartum infection are more common in patients with cirrhosis[3] Fetal growth restriction and prematurity were present in both the cases. Wound infection occurred in Case 1. However what really makes the difference is the stage of liver disease. If cirrhosis is well compensated, the pregnancy is usually follows a

normal pattern. It is quite common to observe that the liver function trends to improve during the 2nd and 3rd trimester of pregnancy [1]. However complications do occur. Pregnancies among women with cirrhosis are increasing [3], emphasizing the importance of close maternal-fetal monitoring during pregnancy.

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