

CASE REPORT

SUCCESSFUL PREGNANCY OUTCOME IN CASE OF PATIENT OF BOH WITH MASSIVE SPLENOMEGALY WITH PANCYTOPENIA IN KNOWN CASE OF LIVER CIRRHOSIS

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ABSTRACT: A case of pregnant woman with liver cirrhosis, massive splenomegaly and hypersplenism with previous bad obstetric outcome is described. This time pregnancy could continue up to 33 weeks of gestation against the background of persistent pancytopenia right from start of pregnancy. Taking into consideration previous fetal losses at 34 weeks of gestation and USG showing oligohydramnios at 33 weeks of gestation we decided to post her for caesarian section after a course of steroids. Due to underlying thrombocytopenia excessive oozing was more troublesome which was dealt by skilled suturing, hot mops and intra and postoperative support with Fresh frozen plasma, Packed cell transfusions and platelets transfusions. Mother was discharged on 9th day. Baby was discharged after 1 month with no neuro deficit. As prematurity and fetal losses are major fetal morbidities, vigilance and timely delivery helped in this case. Life threatening hemorrhagic and infective complications after operative intervention is described in cases of liver cirrhosis with splenomegaly and hypersplenism which were dealt by judicious use of blood components and higher antibiotics.

KEY WORDS: cirrhosis of liver, splenomegaly, hypersplenism

INTRDUCTION: The prevalence of cirrhosis in reproductive-age women is around 0.45 cases per 1000. Patients with cirrhosis are at high risk for premature deliveries (1). Splenomegaly is a frequent finding in patients with liver cirrhosis due to associated portal hypertension and may cause hypersplenism which means associated pancytopenia (1, 2) we present a case of obstetric patient with cirrhosis of liver, gross splenomegaly and hypersplenism. After three bad obstetric outcomes this patient had successful pregnancy outcome. Prematurity of fetus, infective and hemorrhagic morbidities in mother are major challenges faced by the clinician.

CASE REPORT: 25 years old pregnant patient with obstetric score G4P2L0A1 was admitted with 7 months of amenorrhea with known case of liver cirrhosis and gross splenomegaly and hypersplenism for anemia correction. Her details of previous losses were as follows: 1ST –pregnancy was at 21years of age. Patient underwent Full Term Caesarian Section. Indication for caesarian section was primi with 36 weeks pregnancy with status eclampticus with known case of liver cirrhosis with gross splenomegaly. Baby was fresh still born. Postoperative period was stormy with cortical venous thrombosis. Patient recovered well after anticoagulation.

During ANC period pt gave history of viral fever in second month of pregnancy. That time viral markers were negative. Gastroscopy revealed no evidence of esophageal varices. Liver Function tests were normal .Complete blood count – was showing following results Hb-7.9 gms, MCV-57 cubic microns, MCH-20pg, MCHC-35 percent Leucocytes-2500/cumm

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Platelets -78000/cumm, antinuclear antibodies titres were -Insignificant while DSDNA-antibody titres were significantly positive, Ultrasonography revealed -Liver Small in Size, Evidence of Portal hypertension with Gross Splenomegaly.

2nd (At 23 years of age) Medical termination of pregnancy for rapid succession of pregnancy. LFT-normal

3rd (at 25 years of age - 8 months (35wks) preterm, normal delivery, 2.6 kg fresh still born female baby, during ANC period persistent pancytopenia on blood smear and USG - showing gross congestive splenomegaly with evidence of old thrombus in splenic vein on Doppler study

4th - present pregnancy. (27 years old) 1st-visit-USG-8 weeks Single live intrauterine pregnancy. Throughout the pregnancy her blood picture was as follows:-

GEST AGE	HB (gms %)	TLC (microL)	PLATELETS (microL)	PCV %	MCV (cu micron)	MCH (pgm)	MCHC (percent)
8 th week	6.9	3000	73000	24	6.1.1	17.2	27.9
22 nd week	7.6	3200	57000	27	77	21	27
28 th week	8.0	3700	50000		77	21	29
32 nd week	7.6	2600	43000				

Liver function tests were normal throughout the pregnancy. Coagulation profile- normal. Sr. ferritin-5 ng/ml. ANA, DSDNA, RA FACTOR, APA-all negative.

USG abdomen -liver small in size, coarse echo texture and evidence of portal hypertension with splenic vein thrombosis with gross splenomegaly. Gastroscopy revealed no evidence of varices. Viral markers for HAV, HBV and HCV were negative.

Per Abdomen Exam - Massive Splenomegaly reaching Up To Umbilicus 15 Cm Below Left Costal Margin.

Obstetric Examination: BP normal, normal weight gain, normal growth of fetus till 32 weeks of gestation and USG - Single Live Intrauterine pregnancy of 29 wks with reduced liquor with normal Doppler.

Treatment: Supportive management.

1/-iv iron sucrose. Total 900 mg infused 2/ multivitamin 3/ antacids 4/strict vigilance on fetal Status.

AT 33 wks of gestation patient gave history of persistent low backache with intermittent pain in abdomen.

Elective LSCS was planned after two doses of steroids. Intra-op findings-1/ lower segment was fragile. 2/oozing excessive with multiple hematoma formation dealt by skilled suturing with delayed absorbable sutures 3/ Baby 1. 5 kg cried well after birth. Needed NICU care. 4/ Uterus retracted well. Perioperatively patient was supported with FFPs and platelets. Postoperatively pt was kept on higher antibiotics. Patient was discharged on 8th day. Baby was kept in NICU for 3weeks and was discharged in good condition with no neuro deficit.

DISCUSSION: Cirrhosis of liver can be associated with infertility, preterm deliveries/fetal losses. Stage of liver disease is important in determining outcome of pregnancy (1). As the treatment of cirrhosis improves, pregnancy in patients with cirrhosis is likely to become more common. Although maternal and fetal mortality is expected to similarly improve, pregnant patients with cirrhosis face

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unique risks. These include higher rates of spontaneous abortion and prematurity and a potential for life-threatening variceal hemorrhage, hepatic decompensation, splenic artery aneurysm rupture, and postpartum hemorrhage. Pregnancy outcome may be influenced by the underlying etiology of liver disease, as in viral and autoimmune hepatitis. (2) The incidence of preterm delivery was 50% (4 of 8) and the majority (75%) occurred in pregnancies where associated complications were present. (3)

Patients of liver cirrhosis, especially during pregnancy needs to be accessed for evidence of portal hypertension The management of pregnancy with portal hypertension should only be done at tertiary care centers by a multidisciplinary team with backup facilities for intensive care and blood. Portal hypertension due to cirrhosis compounds the physiological increase in circulating blood volume, elevation in portal pressure and added pressure from the gravid uterus on the inferior vena cava and can result in massive bleeding. It is most common during the second trimester with 20–27% chance of bleeding from esophageal varices which is amplified to 62–78% if there are demonstrable varices [1-4, 7]. Therefore, it is mandatory to assess such patients for portal hypertension, which can be done by indirect evidence, such as the presence of esophageal varices, abdominal collateral veins, hypersplenism and ascites. (6)

Hypersplenism is a type of disorder which causes the spleen to rapidly and prematurely destroy blood cells. Symptoms of hypersplenism include easy bruising, easy contracting of bacterial diseases, fever, weakness, heart palpitations, and ulcerations of the mouth, legs and feet. Individuals may also bleed unexpectedly and heavily from the nose or other mucous membranes, and from the gastrointestinal or urinary tracts. Most patients will develop an enlarged spleen, anemia, leucopenia, or abnormally low white blood cell counts, or thrombocytopenia, a deficiency of circulating platelets in the blood. Other symptoms may be present that reflect the underlying disease that has caused hypersplenism. Pajor A (1) found hypersplenism in 5 patients out of 11 patients of liver cirrhosis which he has described. Similar case has been described by Sandhu (4). This was a case of primigravida with massive splenomegaly with hypersplenism. Pregnancy could continue upto 38 weeks of gestation when elective caesarian section was planned.

A clinical case of a pregnant suffering from hepatic cirrhosis with ascites, splenomegaly and portal hypertension is described in literature. The pregnancy carried on till the 31st week, even though with the repeated use of tocolytic agents. Cesarean section was performed because of the onset of serious jaundice and the decline of general maternal conditions. (5)

Vaginal delivery can be anticipated in most women, and cesarean section should be preserved for obstetric indications. The risk of postpartum hemorrhage is greatly increased, particularly in patients with previous shunt surgery. Perinatal loss is high because of the increased rate of premature delivery and stillbirth. Maternal prognosis is grave in women with cirrhosis (6):

In a controlled setting vaginal delivery is usually safe and early forceps delivery or vacuum extraction should be considered to prevent any rise in portal pressure due to prolonged straining during labor. Women with cirrhosis generally tolerate laparotomy poorly; therefore the option for caesarean section should be availed with care and caution. The risk of postpartum hemorrhage is greatly increased. Perinatal loss is high because of the increased rate of premature delivery and stillbirth. Maternal prognosis is grave in women with cirrhosis (4). The stage of the liver disease is the most important determinant of the outcome of the pregnancy. Splenomegaly and hypersplenism

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in pregnancy can lead to dangerous haemorrhages and infective morbidities and also mortalities (7, 8)

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