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Portal hypertension in pregnancy

Gebelikte portal hipertansiyon

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SUMMARY

Objective: We aimed to revise the pregnancy and portal hypertension approach, which is rarely seen together and may cause bleeding in esophageal varices.

Case Report: A 35-year-old patient with portal hypertension at 38 weeks of gestation, according to first-trimester ultrasonography (USG) was admitted to our clinic. At the age of 16, she was diagnosed with a liver biopsy. She had had two vaginal births before. The patient did not have 2nd and 3rd-trimester screening tests. The detailed USG was normal. The abdominal USG had a liver size of 14.5 cm. Hepatic venules and portal venous diameter were 8.2 mm at the level of the liver hilus. Spleen size was 14.5 cm. In the vicinity of the splenic hilus, the widest 13 mm diameter tortuous veins were observed. A council consisting of Gynecology, Gastroenterology and Neonatology team at the 32nd week of pregnancy it was suggested that clinical and laboratory findings were closely followed and vaginal delivery was recommended unless there was an obstetric problem. The pregnancy was terminated by cesarean section because acute fetal distress developed when she was followed on the travay when she applied at 38th gestational week. Meconium 2420 gr 48 cm Apgar score 6/8 male baby was born.

Conclusions: Portal hypertension is defined as an elevation of blood pressure in the portal vein and its branches over 200-230 mmH2O. Portal hypertension and pregnancy can rarely be confronted. It increases the mortality and morbidity of the baby and the mother. Portal hypertension does not constitute a contraindication to pregnancy. During pregnancy, esophageal variceal bleeding, premature delivery, intrauterine growth restriction, and fetal death can occur. In our case, we had a baby born with low birth weight who had a cesarean section for an obstetric cause. As a result, the management of complications caused by portal hypertension during pregnancy is similar to that in non-pregnant patients, but more intensive monitoring and follow-up are necessary.

Keywords: Intrauterine growth restriction, pregnancy, portal hypertension

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ÖZET

Amaç: Özofagial varis kanamalarına sebep olabilen ve oldukça nadir görülen gebelik ve portal hipertansiyon birlikteliğine yaklaşımın tekrar gözden geçirilmesini amaçladık.

Olgu: 35 yaşında, 1.trimestr ultrasonografisine(USG) göre 38 haftalık gebelik ile birlikte portal hipertansiyonu olan hasta kliniğimize başvurdu. 16 yaşında iken tanı aldığı, karaciğer biyopsisi yapıldığı öğrenildi. Daha önce iki kez

vajinal doğum yapmıştı. Hasta 2.ve 3.trimester tarama testlerini yaptırmamıştı. Ayrıntılı USG'si normaldi. Abdominal USG'de karaciğer boyutu 14.5 cm idi. Hepatik venler ve portal ven çapı karaciğer hilusu düzeyinde 8.2 mm idi. Dalak boyutu 14.5 cm idi. Dalak hilusu komşuluğunda en genişi 13 mm çapta dilate tortioze venler izlendi. Gebeliğin 32.haftasında Kadın Doğum, Gastroenteroloji ve Yenidoğan ekibinden oluşan konseyce klinik ve laboratuvar bulgularının yakın takip edilmesi, obstetrik bir sorun olmadıkça vajinal doğum yapması önerilmişti. 38. gebelik haftasında başvurduğunda travayda takip edilirken akut fetal distres geliştiği için sezeryan ile gebelik sonlandırıldı. Mekonyumlu, 2420gr, 48 cm, Apgar skoru 6/8 erkek bebek doğurtuldu.

Sonuç: Portal hipertansiyon, portal ven ve dallarındaki kan basıncının 200-230 mmH2O üzerine yükselmesi olarak tanımlanmaktadır. Portal hipertansiyon ve gebelik bir arada seyrek olarak karşımıza çıkabilir. Bu durum bebeğin ve annenin mortalite ve morbiditesini artırmaktadır. Portal hipertansiyon olması gebelik için kontrendikasyon oluşturmaz. Gebelik esnasında özofagial varis kanaması, erken doğum,intrauterin büyüme kısıtlılığı ve fetal ölüm gözlenebilmektedir. Bizim olgumuzda ise obstetrik bir nedenle sezaryen yapılmış ve mekonyumlu düşük doğum ağırlıklı bir bebek doğurtulmuştur. Sonuç olarak gebelik sırasında portal hipertansiyon nedeni ile oluşan komplikasyonların yönetimi gebe olmayan hastalardaki gibidir ancak biraz daha yoğun monitorizasyon ve takip gereklidir.

Anahtar sözcükler: Gebelik, intrauterin büyüme kısıtlılığı, portal hipertansiyon

INTRODUCTION

Pregnancy and portal hypertension are rarely seen together. We can divide the causes of portal hypertension roughly into two large groups, cirrhotic and non-cirrhotic. [1]. Non-cirrhotic portal hypertension (NCPH) involves intrahepatic or prehepatic lesions in which there is no evidence of cirrhosis in the liver, resulting in a group of diseases leading to increased pressure in the posterior portal system. More commonly observed in developing countries among these diseases is non-cirrhotic portal fibrosis (NCPF) [2]. Noncirrhotic portal fibrosis is clinically characterized by splenomegaly, anemia and portal hypertension, histologically characterized by fibrosis and sclerosis in the portal system [3]. We aimed to review the approach to pregnancy and portal hypertension resulting in fetal and maternal complications in our case report.

CASE REPORT

35 year old, pregnant with her third child, who did not know the last menstrual period, was admitted to our clinic because of portal hypertension with 38 weeks of gestation according to 1st-trimester ultrasonography. The patient underwent liver biopsy at the age of 16, but pathologic test results were not available. Her past two OB history were significant normal spontaneous vaginal delivery. Her current pregnancy follow-up was done in the secondary health institution, and the patient did not have 2nd and 3rd-trimester screening tests. The detailed USG was normal.

Abdominal ultrasonography showed 14,5 cm liver, which includes parenchymal heterogeneity, it's contour, and parenchymal echos were normal. Hepatic venules and portal vein diameter were 8,2 mm at the liver hilus level. Intrahepatic biliary ducts and proximal of the common bile duct was seen unaffected. Biliary volume and wall thickness were normal, and there wasn't any luminal pathology observed. The spleen size was 14,5 cm, it's contour, and the parenchymal structure was normal. There were dilated tortious venous structures; most dilated one was 13 mm in diameter, was observed next to the spleen hilus. The patient was consulted to Gynecology, Gastroenterology, and Neonatology and she was suggested to be closely followed up with the current clinical and laboratory findings and give birth by vaginal delivery if there isn't any obstetric problem. When the patient admitted in the 38th gestational week, the pregnancy was terminated with c/s because acute fetal distress (AFD) was developed while she was in the travail. 2420gr, 48cm, A: 6/8 male baby was delivered with meconium.

DISCUSSION

Portal hypertension is defined as portal venous pressure greater than 200-230 mmH2O [3] Etiology of portal hypertension can be divided into 2 groups; cirrhotic and noncirrhotic. Noncirrhotic portal hypertension (NCPH) comprises diseases with increased portal pressure (PP) due to intrahepatic or prehepatic lesions, in the absence of cirrhosis [1].Although portal hypertension infrequently coincides with pregnancy, it can lead to serious maternal and fetal consequences. Portal hypertension is not a contraindication to pregnancy but necessitates close follow up. Shaheen and et al. demonstrated that maternal (49 % vs. 17%) and fetal (51% vs. 24%) complications are more frequent in cirrhotic patients than the control group [4]. Esophageal variceal bleeding is reported to occur in 18-31 % cirrhotic patients and 35-44% patients with non cirrhotic portal hypertension [5,6] Variceal bleeding occurs mostly in second and third trimester due to

expanded blood volüme and compression of majör vessels by fetus [7] Spontaneous abortus is more prevalent in cirrhotic patients compared with normal population (30-40 % and 15-20% respectively)[8].Premature birth, IUGR, fetal death are other complications[9]. In our case, there was no major fetal and maternal problem C/S was performed due to obstetric indication. A small for gestational weight newborn with meconium was delivered.

In conclusion, the management of portal hypertension in the pregnant patient is not different than other patients, but these patients require close maternal and fetal monitoring.

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