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Case report / Olgu sunumu

A RARE CASE REPORT; PRIMARY INTRAHEPATIC PREGNANCY

Primer karaciğer içi gebelik; Nadir bir olgu sunumu.

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ABSTRACT

Abdominal pregnancy is a rare condition and liver as a primary site is exceptionally rare. According to available literature, primary intrahepatic pregnancy never progresses to full gestation; therefore it has to be terminated surgically.

This case is reported due to rarity of the event.

Key words: Liver, abdomen, gestation, intrahepatic pregnancy.

ÖZET

Karın içerisinde gebelik görülmesi seyrek rastlanılan bir durum olmakla beraber, karaciğeriçinde gebelik görülmesi ise çok daha sıradışı bir durumdur. Literatür verilerine göre, karaciğer içerisindeki bir gebeliğin normal gelişimini tamamlaması asla görülen bir durum değildir.

Burada nadir bir karaciğer içi gebelik olgusu sunuldu.

Anahtar kelimeler: Karaciğer, karın, hamilelik, karaciğer içi gebelik.

INTRODUCTION

Abdominal pregnancy is a rare condition with an incidence of about 1.4% of all ectopic pregnancies (1-4). It usually results from extension of a tubal gestation. Liver is an exceptional site of attachment and primary intrahepatic pregnancies constitute only about 0.03% of all intra-abdominal pregnancies.

In the past 35 years only 14 cases have been reported of which 3 were living foetuses (2,5,6). Luwuliza and Kirunda in 1978 reported a lithopedion developing from a hepatic pregnancy (7). Only one was investigated by modern imaging techniques (2). Sonography and CT helped in making the diagnosis in our case which merits mention because of its rarity.

Case

A 30 years old female with a progressively enlarging huge lump in right hypochondrium and dull aching pain for five months was admitted in surgical ward. On examination, an intraperitonial firm, cystic, mobile and tender mass was found occupying the right side of abdomen. It extended up to upper part of right iliac fossa. It was moving with respiration and appeared to be originating from liver.

Liver function tests were normal. Ultrasonography of the abdomen showed normal uterus, ovaries and adnexa. Mass was seen separate from uterus and adnexa (Figure 1 and 2).

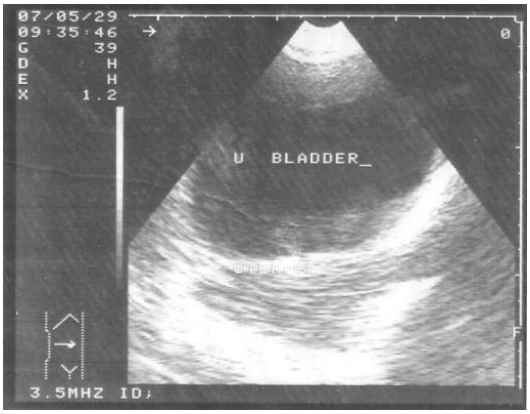

Figure 1: Ultrasonography of the pelvis showed as normal.

A gestational sac containing about a 22 weeks live fetus in upper part of abdomen adherent to inferior surface of liver was revealed. Subsequently it

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was also discovered that the patient had a history of amenorrhoea for 24 weeks. The foetus was implanted on right lobe of liver. Gallbladder and inferior vena cava were appeared to be compressed. Colour Doppler study showed cardiac activity of fetus with recruitment of hepatic vessels by the placenta. Peritoneum was free from fluid or other abnormalities.

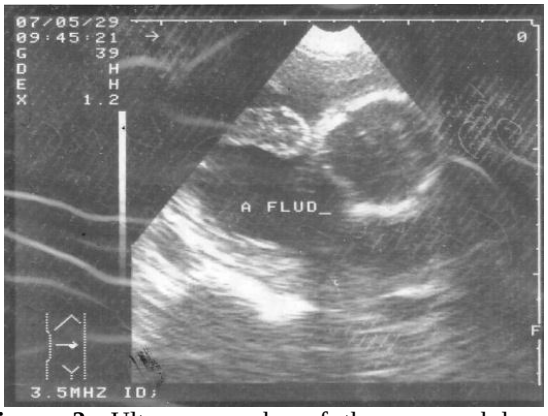

Figure 2: Ultrasonography of the upper abdomen showed a gestational sac in liver.

CT scan of abdomen and pelvis was performed because of these unusual findings. The right lobe of liver showed a 105 mm long hypo dense mass. Within the mass, a fetus floating in fluid was revealed. Placenta was attached to the inferior surface of liver. No other abnormalities were noted (Figure 3 and 4).

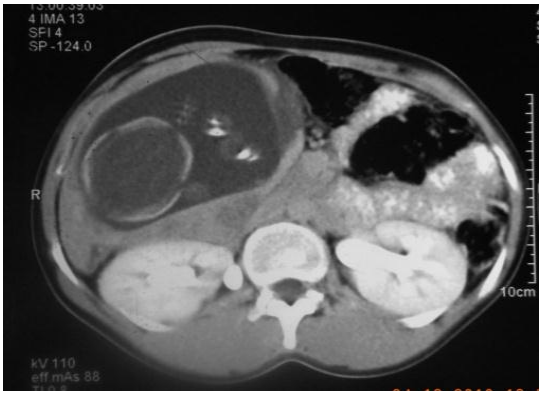

Figure 3: CT showed huge mass in the liver.

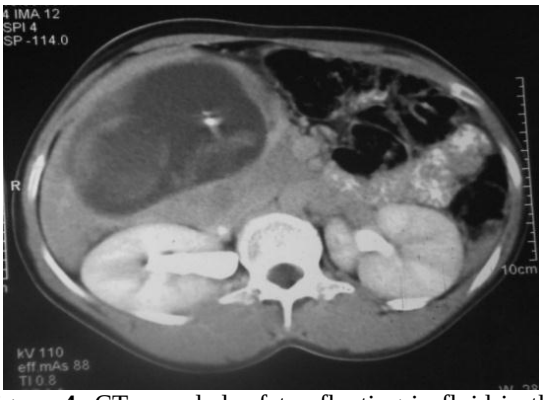

Figure 4: CT revealed a fetus floating in fluid in the liver.

Quantitative HCG analysis was performed which gave a high titre (175.000 IU/L).

An exploratory laparotomy through a midline incision was conducted. A brown mass over inferior margin of right lobe of liver was seen. Taking a rim of liver tissue the sac was excised. The baby weighing 1600 grams died soon after delivery. On Per operative examination, no abnormality was found in uterus and adnexae (Figure 5).

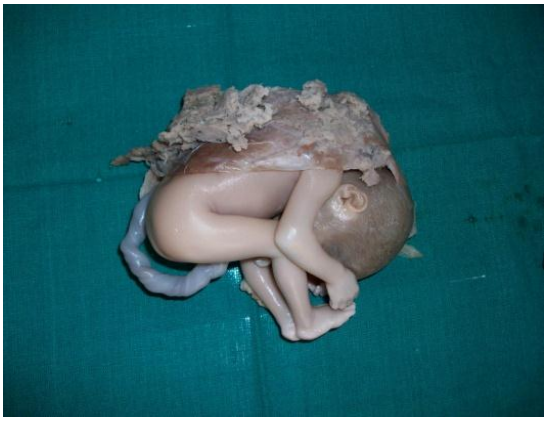

Figure 5: Excised fetus from the liver.

For correction of elevated HCG level six injections of Methotrexate were given at intervals of 72 hours. Post-operative course was uneventful and patient was discharged 20 days after surgery.

DISCUSSION

Of abdominal pregnancies the secondary type is more common. It usually occurs due to breakage of initial implantation site in the tubes and subsequent re-implantation anywhere in the abdomen or pelvis. Most implantations occur in pelvis (1,4).

Primary abdominal pregnancy is extremely rare. In 1942, Studdiford suggested 4 criteria for making such a diagnosis (5);

1. Normal ovaries and tubes,
2. No evidence of uteroperitoneal fistula,
3. Pregnancy related exclusively to peritoneal surface, and
4. Pregnancy occurring early enough to exclude a secondary implantation after initial tubal implantation.

Hepatic primary intra-abdominal pregnancy is an extremely rare entity. Liver offers a favourable environment for implantation due to its rich vascular supply (4).

In contrast to normal uterine pregnancies where HCG induces a decidual reaction around the fetus which protects maternal blood vessels from invasion by trophoblasts, hepatic pregnancies abort in first trimester as decidual reaction fails to occur. Maternal bleeding and invasion by trophoblastic cells disrupt placental site. If hemorrhage is severe, patient may go into hypovolemic shock (3,4). Pregnancy may continue till term if only mild disruption occurs, as further bleeding does not occur after 12 weeks. If it

does occur it is an insidious process with hemodilution. Closeness to gall bladder and duodenum may compel the patient to manifest complaints of gastrointestinal and biliary disease (eg. dyspepsia) (8). Menstrual patterns seem misleading as well (3,8).

Detailed study of gestational sac, its vascularisation and relationship to other tissue by Colour Doppler sonography are important tools for planning surgery and administration of Methotrexate.

Summarising, primary hepatic pregnancy is an extremely rare entity with signs and symptoms that depends on location and gestational age. In first trimester, shock due to bleeding may require surgical intervention. Later bleeding is slow and symptoms misleading pointing towards gastrointestinal and biliary disease.

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