HEPATIC ADENOMA. A REPORT CASE

João Martins Pisco, Vincent Bellina, Erich Lang, Frank Puyau

Departement of Radiology. Louisiana State University Medical Center. U.S.A.

SUMMARY

A case of hepatic cell adenoma showed on ultrasound, radioisotope scanning and angiography is shown. The importance of the angiography on accurate diagnosis and precise location prompts the report of this proven case.

Hepatic cell adenomas are the least frequent of the benign hepatic tumors, however there is an increased incidence related to the pill.²

The management of the hepatic adenoma, like any other mass, requires ultrasonography, 99m Tc sulfur colloid liver scan and angiography ³ beside other studies. Hepatic scanning usually shows a *cold* area unless the tumor is small in size. ⁴ The ultrasound in hepatic adenoma usually shows a well defined solid mass, however if the tumor is bleeding a cystic or complex mass with solid and cystic compound can be found.

The first angiographic findings in a proved liver-cell adenoma were published in 1967.⁵ Angiographically is a hypervascular tumor with peripheral arterial supply with centrally penetrating vessels like a wheel spoke pattern, and well defined margin.⁶ There is a persistent tumor blush into the venous phase.

CASE

Patient is a 9 year old black male, with 1 month history of right upper quadrant pain. That started after he fell off a bicycle and began to complain of abdominal pain localized to the RUQ, described as a pressure, worse at night. He became anorexic and womited

Past medical history was significant in that the patient complained of slight impression in RUQ since the age of 4 years. Liver biopsy done 1 year ago was normal.

On physical examination there was an enlarge, nodular, firm montender liver. There was a II/VI systolic ejection murmur, heard loudest at the lower left sternal border that did not radiate.

Lab examination — Alb - 4.4, BUN - 5, T. bili - 3.2 mg, LDH - 265 units, SGOT - 65 units, HcT - 36 %, UBC - 13.500 Hgb - 12.3.

Radiological examination — The lesser curvature and antrum of the stomach appeared displaced slightly downward and postero-laterally with smooth extrinsic pressure consistent with displacement by liver enlarged or liver mass. On IVP — there was a mass in the RUQ consistent with mass or liver enlargement or mass within the liver.

On arteriogram the left hepatic artery was dilated. A highly vascular hepatic mass was visualized, supplied mainly by that artery which branches were spred around it and from those small vessels penetrating and radiating to the center (Fig. 1). On venous phase there was an uniform blush.

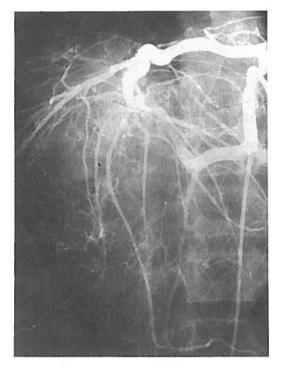


Fig. 1 — Hepatic arteriography — Left hepatic artery dilated, which vessels spred around a mass and from those small vessels penetrating and radiating to the center

On ultrasound an oval complex mass of about 10 cm on greater diameter was visualized, with some cystic compound. The hypothesis of a tumor with some necrosis was raised (Fig. 2). The radioisotope scanning with $99m_{Te}$ showed an enlarged liver with a filling defect (Fig. 3).

On exploratory laparotomy there was a large round mass which diameter was approximately 10 cm, that was involving mainly the medial segment of the left lobe of the liver, although the majority of the lateral segment of the left lobe of the liver

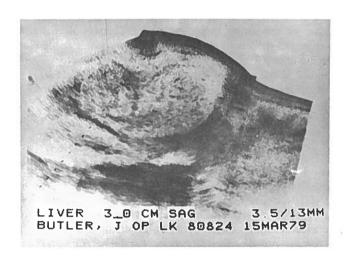


Fig. 2 — Hepatic ultrasound — An oval complex mass of about 10 cm on greater diameter with some echoes and some cystic compound

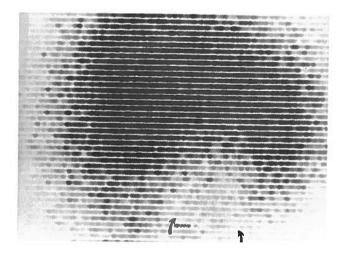


Fig. 3 — Scanning with 99mT_c — Round filling defect due to decreased uptake of the radioisote

was also involved. The mass was easily dextinguishable from the rest of the liver, however the lateral most area of resection was indurated and harder than the normal liver parenchyma for a child that age. The great majority of the medial segment of the left lobe of the liver was resected along with all of the lateral segment. In the resected specimen a large nodular tumor mass which had an appearance similar to the normal liver tissue. On cut section the tumor nodule measured roughly 10 cm in diameter. In the center of the tumor there were large areas of necrosis and hemorrhage. In some areas it appeared definitely encapsulated and in others it blended imperceptively with the surrounding liver tissue.

The pathological diagnosis was hepatic adenoma with areas of necrosis.

On follow up 6 months after the surgical resection of the tumor the patient was doing well without any complaint.

DISCUSSION

The ultrasound and nuclear medicine can be useful as diagnostic aids in hepatic adenoma, showing the presence of a lesion. However the angiogram is highly suggestive because the clearly defined margins and the radiating vessels from the periphery are almost always present.⁴ The angiogram besides beeing very accurate in pre-operative diagnosis ⁴ is very important in precisely localizing the lesion.³

In our case the diagnosis was made preoperatively by angiography. This diagnostic aid also located the lesion to the left lobe of the liver because only the left hepatic artery was dilated and all the tumor vessels were supplied by that vessel.

RESUMO

Apresenta-se um caso de adenoma hepático demonstrado por ultrasonografia, medicina nuclear e angiografia.

Dos três meios complementares de diagnóstico apenas a Angiografia pode fazer o diagnóstico e localização precisas.

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Adress for reprints: João Martins Pisco Serviço de Radiologia Hospital de Santa Marta Lisboa - Portugal