Giant hepatic paraganglioma succesfuly treated with embolisation

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To the Editor,

Extra-adrenal pheochromocytoma may occur at any location where paraganglionic tissue is present and primary hepatic paraganglioma is a very rare entity (1). Internal cyst formation is frequently seen in large paragangliomas with intramural hemorrhage and it can mimic cystic diseases of the liver.

A 71 year old man admitted to our clinic with the complaint of dull pain on right upper quadrant for 3 months. In his past medical history he had diabetes and hypertension for 20 years, which were under control with fosinopril sodium and gliclaside. Four years before admission, a cystic lesion observed on ultrasonography was diagnosed as hydatid disease. Physical examination revealed hepatomegaly and an epigastric mass. On laboratory analysis, counter blood count, sedimentation rate, INR was normal, but creatinin was 1.3 mg/dl, AST 67 IU/ml, ALT 64 IU/ml, albumin 3.6 g/dl, total bilirubin was 2 mg/dl.

Ultrasonography and CT revealed a large 20 cm mass with multiple cystic components of the largest 15 cm in the liver (Fig. 1). MR was performed in order to distinguish whether the lesion was in the liver or arising from the right adrenal gland but no connection with the gland was observed. Bilateral adrenal glands were reported as normal. 24 hour urine analysis revealed normal normetanephrin, metanephrin, vanilmandelic acid but elevated neuron specific enolase levels. CEA, Ca19-9, alpha fetoprotein levels were with in normal range. Mass fine needle aspiration bx under screening was performed

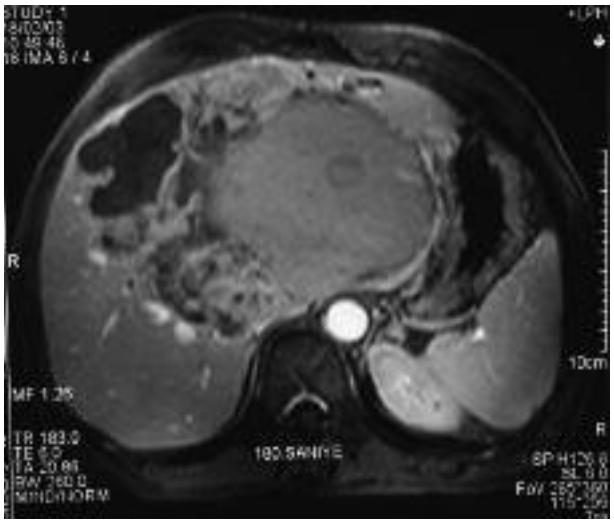

Fig. 1. — MR of upper abdomen showing a huge mass in the liver.

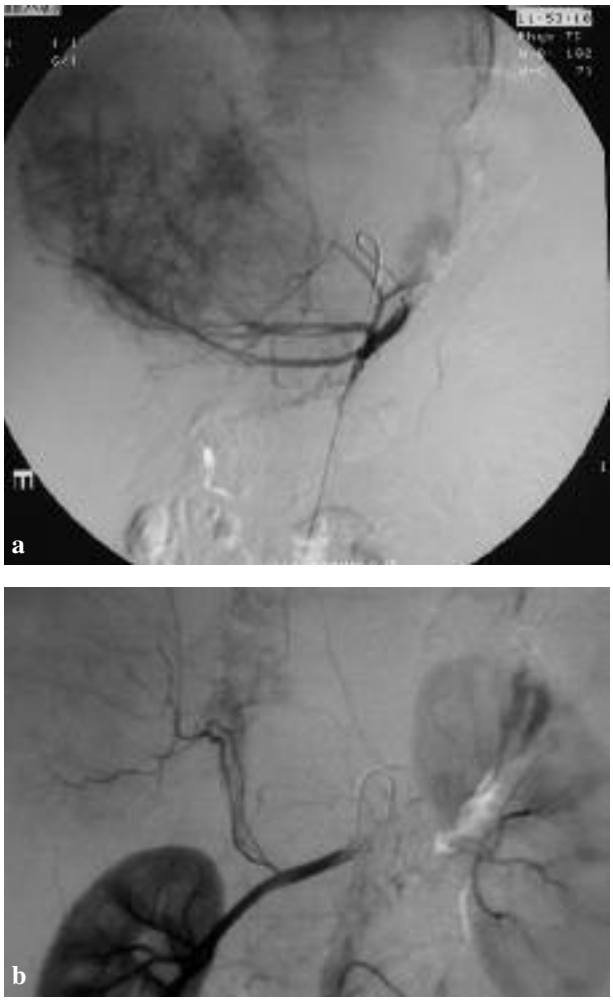

Fig. 2. — Angiography showing mass supplied from a) hepatic artery, and, b) inferior suprarenal artery.

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since the lesion had solid components and revealed neuroendocrine tumor (paraganglioma). Because the lesion was very large and operation was not possible, TACE was considered. During angiography the lesion was filled both from the hepatic artery and the suprarenal artery arising from right renal artery and TACE was successfully performed (Fig. 2). This blood supply confused us about the origin of the lesion and we therefore hypothesized that the lesion might be of adrenal origin. Mild liver enzyme elevations occurred after this procedure and returned to normal with in 2 weeks. The patient was discharged without any complication and had no problem after two years follow up.

Primary hepatic paraganglioma is a very rare pathology and before treatment differential diagnosis with other solid or cystic liver lesions must be made. Radiological techniques including CT and MRI are essential in localization of the lesion but do not show any unique feature for paraganglioma (2-3). TACE is an option of treatment in these patients. When considering TACE for large liver lesions such as paraganglioma, other possible collateral arteries besides hepatic artery must be visualized to increase therapeutic efficacy. This may also give extra information about the origin of the lesion.

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