Giant Phaeochromocytoma: Case Report

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Abstract
A case of giant phaeochromocytoma occurring in a 47-year-old man with no signs or symptoms of catecholamine secretion is reported. Abdominal ultrasound scanning, chest X-ray, computed tomography and magnetic resonance imaging were preoperatively performed. The patient was operated through a thoracoabdominal incision and section of the left hemidiaphragm. The giant retroperitoneal mass was en-bloc resected together with the left adrenal gland. Macroscopic sectioning showed a smoothly rounded 29 x 21 x 12 cm tumour attached to a normal left adrenal gland, weighing 4050 gr. The huge size of the neoplasm, the several areas of necrosis, the size and monomorphic appearance of the cells, and the large number of mitotic figures afforded a diagnosis of malignant phaeochromocytoma.

Introduction
Phaeochromocytoma is usually diagnosed at an early stage, as it is associated to a number of signs and symptoms related to the inappropriate concentration of circulating catecholamine. However, some of these tumours can stay asymptomatic and thus be serendipitously discovered at computed tomography or magnetic resonance imaging, performed for non-related conditions, as usually small lesions.

We report a case of giant phaeochromocytoma occurring in a subject with no signs and symptoms of catecholamine secretion.

Fig. 1
Magnetic Resonance Imaging of chest and abdomen showing a 24 x 15 cm mass, entirely occupying the left abdomen and displacing upwards the left diaphragm.
A 47-year-old man was referred by his GP because of a rapidly growing mass in the left abdomen. The patient reported a sense of weight in this area for the last 10 months, and the loss of 8 kg during 7 months. Blood pressure had been repeatedly taken at each consultation showing no remarkable increase, being on admission of 155/75 mmHg. Biochemical results only revealed a mild sideropenic anaemia and an increase of erythrocyte sedimentation rate (109 mm/h). Catecholamine production was evaluated by measuring urinary metanephrines and was normal, while physical examination showed a thin man with a painless giant mass, visible at inspection, entirely occupying the left abdomen. At ultrasound scanning the lump was a hyperchoic highly vascularized 33 x 16 cm tumour dislocating the left kidney in the left fossa, and the spleen cephalad. A radiogram of the chest showed an upwards shift of the left hemidiaphragm. Computed tomography and magnetic resonance imaging (Fig. 1) revealed a 24 by 15 cm retro-peritoneal neoplasm, with some areas of necrosis and some others of calcification. It was concluded that the tumour was of left adrenal gland origin.

Surgery was performed through a thoracoabdominal incision and section of the left hemidiaphragm, which afforded an excellent exposure. The liver and the peritoneum were free of metastases. The giant retroperitoneal mass presented a prominent venous drainage, and an extremely cautious en-bloc resection, together with the left adrenal gland, was accomplished.

The surgical specimen consisted of a smoothly rounded 29 x 21 x 12 cm tumour (Fig. 2) attached to a normal left adrenal gland, weighing 4050 gr.