A large adrenal tumor

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INTRODUCTION

Laparoscopic surgery was slow to become established in solid organs in comparison to hollow viscera, mainly due to problems related to hemostasis and the extraction of solid organs. Nevertheless, laparoscopic adrenalectomy is currently the treatment of choice in benign adrenal disease (1), and might become the treatment of choice for malignant adrenal tumors (2,3).

CASE REPORT

A 58-year-old man with a history of arterial hypertension, chronic renal insufficiency, bilateral kidney cysts, upper digestive tract bleeding due to duodenal ulcer, dyslipemia, type-I obesity (body mass index = 33.4 kg/m²), and prolactinoma

Fig. 1. Axial abdominal computed tomography: large, partially calcified left adrenal mass.

Fig. 2. Sagittal abdominal computed tomography, 4D reconstruction: large left adrenal tumor.
resection had a large, nonfunctional left adrenal tumor at abdominal CT (Figs. 1 and 2). We used a laparoscopic approach, freed the splenic flexure, and moved the spleen and pancreas medially. After cutting the main left adrenal vein as well as the accessory veins and arteries, we excised the entire adrenal gland with the tumor, checked hemostasis, and removed the specimen in a preformed sac through a transversal mini-laparotomy. The histological study of the specimen revealed a heterogeneous lesion, with hemorrhagic areas, brownish areas, yellowish areas, and extensive areas of hemorrhagic necrosis, as well as septa with foci of calcification. The definitive diagnosis was adrenal cortical adenoma measuring 14 x 12 x 11.5 cm in size (Fig. 3). The patient was discharged on the third day after surgery without complications.

DISCUSSION

In general, a laparoscopic approach is not recommended for adrenal lesions greater than 10 cm in diameter because of the technical difficulties involved, and the possibility of malignancy (2); however, in our series of 30 laparoscopic adrenalectomies in the last 4.5 years we resected four adrenal glands measuring 10, 10, 12, and 14 cm in diameter, respectively, without complications. Few reports describe the laparoscopic resection of adrenal masses greater than 14-15 cm (4).

Gagner, one of the pioneers in laparoscopic adrenalectomy, claimed that the limitations of laparoscopy depended on the surgeon’s experience rather than the technique itself (3).

Laparoscopic adrenalectomy has the advantages of minimally invasive surgery over open surgery, including less morbidity, less need for analgesics, shorter hospital stay, and faster recovery (1).

REFERENCES