Case Reports

Arch. Esp. Urol. 2009; 62 (2): 134-136

GIANT ADRENAL CARCINOMA. CASE REPORT.

Gustavo Emilio Muro Toledo, Jorge Luís Losada Guerra, Arelys Martín Pérez and Idel Reimundo Pérez Marín.

General Urology Department. "Camilo Cienfuegos Gorriaran." University Hospital. Sancti Spiritus. Cuba.

Summary.- *OBJECTIVE: To present a case of giant suprarenal carcinoma assisted by the Urology Service of the "Camilo Cienfuegos Gorriarán" General University Hospital of Sancti Spíritus, Cuba.*

METHODS: 32-year-old male patient who attended the emergency urology consultation, presenting left flank pain and a thirty -pound loss of weight in a three- month period. The radiological studies showed a great tumoral mass with displacement and infiltration of neighbor structures. Pathological study confirmed the diagnosis of suprarenal carcinoma.

RESULTS: The treatment applied was surgical excision surgery via thoracico-abdominal approach. The postoperative evolution was satisfactory. Several parameters of bad prognosis such as weight and elevated size, necrosis, pattern of diffuse growth and capsular invasion were present. Death took place 6 months after intervention due to the progression of the illness.

CONCLUSIONS: The big dimensions of the tumor determined a wide excision surgery which didn't stop the progression of the disease and the death of the patient 6 months after being operated.

Keywords: *Suprarenal gland. Retroperitoneal tumor. Giant. Suprarenal carcinoma.*

Resumen.- *OBJETIVO: Presentar un caso con Carcinoma Suprarrenal Gigante atendido en el Servicio de Urología Hospital General Universitario Camilo Cienfuegos de Sancti Spíritus, Cuba.*

MÉTODO: Paciente de 32 años de edad masculino que acudió a consulta de urgencia de Urología por presentar dolor en flanco izquierdo y pérdida de treinta libras de peso en un periodo de tres meses aproximadamente. Los estudios imagenológicos mostraron una gran masa tumoral con desplazamiento e infiltración de estructuras vecinas. En el estudio histológico se comprobó el diagnóstico de carcinoma suprarrenal.

RESULTADOS:El tratamiento aplicado fue la cirugía de exéresis por vía toraco-abdominal. La evolución postoperatoria fue satisfactoria. Se presentaron varios parámetros de mal pronóstico, como peso y tamaño elevados, necrosis, patrón de crecimiento difuso e invasión capsular. El fallecimiento se produjo a los 6 meses de la intervención por progresión de la enfermedad.

CONCLUSIONES: Las grandes dimensiones del tumor determinaron una cirugía de exéresis amplia, lo cual no impidió la progresión de la enfermedad y el fallecimiento del paciente a los 6 meses de operado.

Palabras clave: *Glándula suprarrenal. Tumor retroperitoneal. Carcinoma suprarrenal gigante.*

CORRESPONDENCE

Gustavo Emilio Muro Toledo
Edificio 21 Apto 19 Olivos 3
CP. 60100 Sancti Spíritus. (Cuba).

dramartin@polcentro.ssp.sld.cu

Accepted for publication: 29th April, 2008.

INTRODUCTION

The carcinoma of the adrenal or suprarenal cortex is not a very frequent illness. It has an incidence from 1 to 6 patients every one million inhabitants and it is more common in the ages ranging between 40 and 50 years (1) (2,3). It can be functionally active and clinically detected by an excess of hormonal secretion. However, most of these tumors grow asymptomatically until they reach a great size and infiltrate neighbouring structures, which

worsen the prognosis. The criteria of malignancy of the suprarenal carcinoma, as well as the effectiveness of its adjunct treatment are discussion topics, which, together with its somber prognosis, have led to the publication of isolated cases of surgical groups, in an attempt to know this affection more deeply.

The objective of the present article is to present a new case of suprarenal carcinoma of big dimensions that was assisted by our services.

CASE REPORT

32 year-old male, suffering from a long term lumbago evolution that had become worse in the last few days, as well as from a 30 – pound corporal weight loss in a three month period approximately. Symptoms and signs of suprarenal hyperfunction were not detected. In the abdominal exploration, a hard tumoration was felt in the left hypochondrium that extended to the mesogastrio and the left iliac fossa. The image studies carried out were: abdominal ultrasound, chest x-ray, a descending urogram and a CT Scan (Axial Computerized Tomography). By means of the thorax x-ray, metastasis was not detected. The discoveries obtained in the other radiological studies indicated the presence of a well defined extensive mass, of regular contours and with heterogeneous signs, suggesting haemorrhagic and necrotic areas. There was displacement of the neighboring structures with infiltration. Neither Infiltration of the liver nor of the inferior cava vein was demonstrated. The treatment consisted on an exeresis surgery via thorax and abdomen with clamping of the thoracic aorta for the control of transoperatory haemorrhage. In addition to the resection of the left nefrectomy tumor, a splenectomy with packing of the hilar adenopathies was performed (Figure 1).

The extirpated tumoration was well encapsulated, weighing 4 350 grams with a maximum diameter of 24 cm. (Figure 2). Its macroscopic study showed a solid mass with haemorrhagic areas. The tumor infiltrated the capsule and the perirenal fats of the whole superior pole of the left kidney as well as the spleen. In the histological study, the diagnosis of a carcinoma of the suprarenal gland was proven. The postoperative evolution was satisfactory and the patient was released from hospital the tenth day after surgery. His survival lasted six months. Death took place due to progression of the illness.

DISCUSSION

When the cortical suprarenal carcinoma reaches a great size and infiltrates neighbouring structures, it can originate difficulties in the differential radiological diagnosis with other retroperitoneal tumorations. Radiological studies play an important role for the diagnosis of the intra abdominal tumours, being the most important of them all the ultrasonography and the CT scan, either in the detection of small tumours as well as of big tumoral masses (5). Although the use of the tomography with positron emission could be effective in the identification of unsuspected places of metastasis, it is not clear yet what role it plays as a tool of estimation (6).

The distinction between cortical benign and wicked lesions is difficult to make in the preoperatory phase. Tumours bigger than 6 cm in their diameters are usually generally carcinomas (7).

The great tendencies that the suprarenal carcinoma has to invade the vascular structures, and to originate metastasis precousciously, as well as the anatomical deep situation of the suprarenal glands, make it possible for the

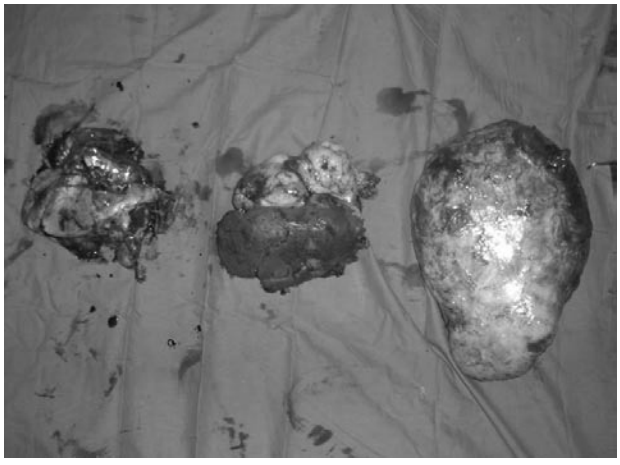

FIGURE 1. Tumor Suprarenal Giant, Spleen and Left Kidney.

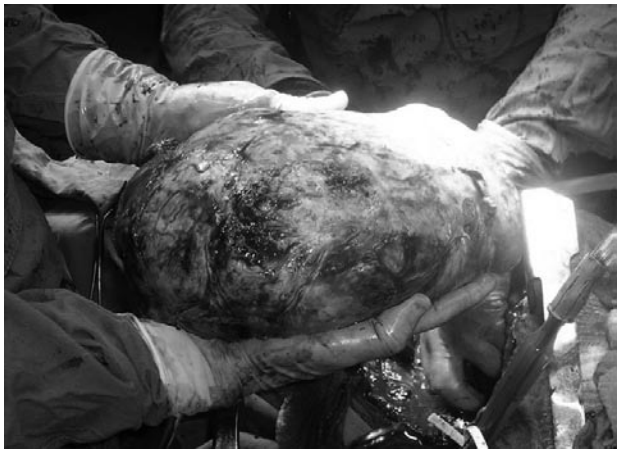

FIGURE 2. Giant Suprarenal Carcinoma.

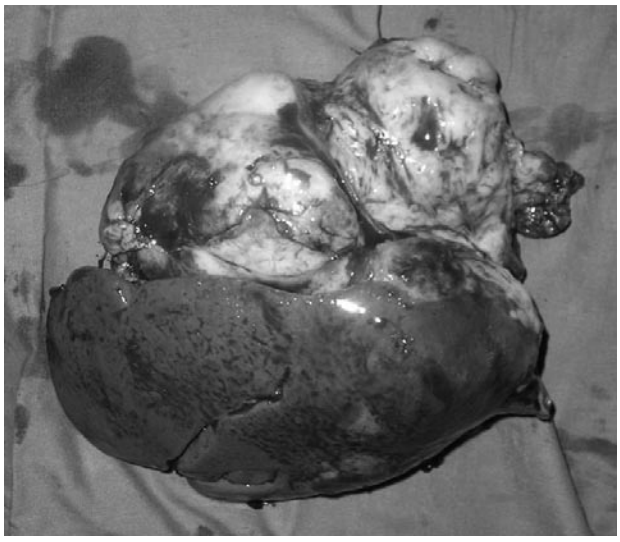

FIGURE 3. Enlarged image of the surgical piece corresponding to the spleen with the packing of hilar adenopathies.

tumor to be in an advanced stage when it is palpable. Also, the clinical thought related with these tumors associates fundamentally to the hyper functional syndrome; however, most of these tumours are not functional, and in other occasions their clinical form of functional expression is hidden, as it happens, for example, in tumours with androgenic hyper secretion in males. Approximately 60% of patients show up with symptoms related to the excessive secretion of hormones (8). The non functional carcinomas can be detected by symptoms of local invasion or by metastases. In our case, several parameters of bad prognosis were presented: the great tumoral volume, the intra tumoral necrosis and the capsular invasion. Survival lasted 6 months, in spite of the total exeresis of the tumor. Other authors (9) report a survival of less than 9 months in patients with tumours in stage IV, unless a complete remission occurs.

For Ramírez and cols. (10), surgery is the first therapeutic option in all the cases, even in the presence of metastasis or invasion for contiguity. According to these authors, a surgical aggressive intervention is justified, since cases of long remissions are described.

The prognosis of the suprarenal carcinoma is reserved for patients with very advanced stages. In occasions, surgery is not possible and when it is practiced, it is not always healing. Some authors (8) report 14 – month periods of survival.

The retrospective studies have been able to identify two important prognosis factors: The effectiveness of the surgical resection and the tumoral stage. They have tried to look for multiple morphological parameters that allow to predict the behavior of these lesions; nevertheless, some cases with bad prognosis parameters have a benign behavior or of very low aggressiveness. Patients that don't refer evidence of invasion of the local tissue or of the lymphatic ganglia will have a better prognosis.

REFERENCES AND RECOMENDED READINGS (*of special interest, **of outstanding interest)

**1. MedlinePlus Enciclopedia Médica. Carcinoma de la Corteza Suprarrenal http://www.cancer.gov/espanol/pdq/tratamiento/cortezasuprarrenal/patient/#Keypoint1
2. Serra SM, Huarte CA, Cuadro PR et al. Adrenal Carcinoma review on a clinical case. Arch. Med. Int,mar, 2002; :48-52. http://portal.revistas.bvs.br/transf.php
**3. Norton JA. Adrenal tumors. In: DeVita VT Jr, Hellman S, Rosenberg SA, eds.: Cancer: Principles and Practice of Oncology. 7th ed. Philadelphia, Pa: Lippincott Williams & Wilkins, 2005, pp 1528-39.
4. Pabón N, Gómez C, Garavito G et al. Carcinoma corticosuprarrenal: estado actual de nuestro conocimiento. Rev Colomb Cancerol 2005; 9:123-29. http://portal.revistas.bvs.br/transf.php
*5. Epamiondas WA, Migyiama N, Vilaça MV et al. Carcinoma de supra-renal con trombo en vena cava inferior. Rev Med 2005; 19:83-5. http://portal.revistas.bvs.br/transf.php
6. Becherer A, Vierhapper H, Pötzi C et al. FDG-PET in adrenocortical carcinoma. Cancer Biother Radiopharm 2001, 16: 289-95.
7. Monjero-Ares I, Gegundez-Gómez C, Couselo-Villanueva JM et al. Asociación de feocromocitoma con adenoma suprarrenal contralateral no funcionante. Cir Esp 2006; 79:126-28.
*8. Allolio B, Hahner S, Weismann D, Fassnacht M. Management of adrenocortical carcinoma. Clin Endorinol 2004; 60:273-87.
9. Ng L, Libertino JM. Adrenocortical carcinoma: diagnosis, evaluation and treatment J Urol 2003; 169: 5-11.
**10. Ramírez CP, Santoyo J, Domínguez M E et al. Carcinoma suprarrenal: Supervivencia a 7 años libres de enfermedad tras resecciones repetidas de recidivas locoregional y a distancia. Revisión a raíz de un caso con una pobre esperanza de vida inicial. Arch Esp Urol 2005; 58:115-19.