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Sarcomatoid renal cell carcinoma: Case reports

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ABSTRACT
Sarcomatoid renal carcinoma is a rare and agressive variant of the cancer of the kidney. These tumors are indifferencied and originates from all renal cell carcinomas.The diagnosis is exclusively histologic and therapeutic modalities are limited to radical nephrectomy. We report a new case and will discuss diagnosis, therapeutic and prognostic characteristics of this rare and agressive entity.

Introduction

The term sarcomatoid renal cell carcinoma was introduced by Farrow in 1968, who studied 38 cases of kidney tumors with a double quota of malignant cells: carcinomatous component and undifferentiated pleomorphic sarcomatoid component. [1]

The classification of tumors with features of "carcinoma" and "sarcoma" has been debated since Virchow in 1864, which initiated the term carcinosarcoma [2]. It is now accepted that the sarcomatoid carcinoma of the kidney are not a separate entity but histological can develop from all histological subtypes of renal cell carcinomas, as proposed in the WHO classification 2004 [3,4]. The transformation of sarcomatoid renal carcinoma seems uncommon (1-15%), which explains the low number of series in the literature from his description.

The poor prognosis of sarcomatoid quota has been clearly established over conventional renal cell carcinoma [2] .The aims of this article was to carry a tune based on the recent literature of epidemiological, clinical, biological, and prognostic treatment of sarcomatoid carcinoma of the kidney.

Observation

Mr. K.S, aged 70, with no pathological history. he complained four months left of back pain associated to a single episode of hematuria without other urinary disorder, or associated digestive symptoms. On physical examination. A mass was palpated in the left side extending over 4 cm below the costal margin, solid consistency. Computed tomography objectified an upper pole renal mass, 14 cm long axis, the density was tissue, enhancing is so inhomogeneous after injection of contrast medium. This mass has a break of renal pedicle and an invasion of the renal pedicle (Fig. 1). Before the suspected invasion of the renal pedicle additional magnetic resonance imaging to realize it was an objective process kidney aggressive pace with thrombotic material occupying the left renal vein with the VCI which is free (Fig. 2). The surgical approach was through left subcostal. After detachment of the splenic flexure A exploration had discovered a large tumor adherent to the adjacent structure including a adrenal We performed a left radical nephrectomy, before the invasion of the left renal vein tumor thrombus extraction of by venotomy has was true. A gross examination, part of nephrectomy which measured 18x13x8 cm and weighed 1 kg, found a tumor 13 cm beige color, infiltrating renal perished fat. It is the seige of a extensive tumor necrosis estimated 60% of the surface tumoral.la light of the vein is filled with a tumor thrombus. Microscopic examination revealed a malignant tumor proliferation of fusuform cell has made in intersecting beams has associated with a numerous mitotic. vascular emboli presence of tumor perished. (Figure 3).

This morphological analysis concluded a sarcomatoid carcinoma nuclear grade 4 Furhman. pT3aNx class.

Discussion

The sarcomatoid renal cell carcinoma is a rare variant of kidney cancer. Its incidence in contemporary studies is estimated between 1 and 13% of all renal tumors [5]. The median age of these patients, between 55 and 60 years (32-87 years) was comparable to renal cell carcinoma without transformation sarcomatoid [6, 7]. The sex ratio seemed no different.

Sarcomatoid carcinomas contingent kidney were frequently discovered on clinical symptoms (85 to 90% of cases according to the series), However renal cell carcinoma without sarcomatoid differentiation more than 50% of fortuitous discovery [2, 8, 9, 10]. The most common symptoms were back pain or hematuria. This is macroscopically large masses, with numerous hemorrhagic

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and necrotic foci. This tumor often extends into the perirenal fat and invades the vessels of the hilum.

The sarcomatoid carcinoma is an aggressive variant, it is frequently discovered at a metastatic stage. The usual sites of sarcomatoid carcinoma metastases are the lung, bone, liver, lymph nodes and brain [8,11]. Microscopically, this tumor is a mixed components comprising at varying degrees of pseudo-sarcomatous malignant and epithelial elements [12]. Sarcomatoid components are sometimes so dense that it is difficult to say the epithelial nature of the injury. Therefore, Immunohistochemical can be very useful in these cases because the tumor cells express cytokeratin in 94% of cases, EMA in 50% of cases and vimentin in 56% of cases [6]. On the cytological level, they are classified as nuclear grade 4 Furhman.

The overall prognosis of patients with sarcomatoid carcinoma of the kidney is pejorative. In the recent literature, the median overall survival ranged from 4.9 to 19 months. The survival 2 years varied from 15 to 30% and the 5 year survival from 2 to 20% [6.7].

The gold standard of treatment is nephrectomy (partial or extended) when it is feasible [13,14].

To date, there is no standard systemic therapy for patients with sarcomatoid carcinoma metastatic kidney In his retrospective series of 43 patients with sarcomatoid carcinoma metastatic kidney Golshayan et al reported a rate of 19 % objective response to antiangiogenic [8]. The effectiveness of antiangenic appeared better in patients with a small percentage of sarcomatoid contingents. The Haas et al. In a series of patients with treatment with doxorubicin plus gemcitabine, has shown two complete responses (survival Six and eight years) and partial response [15]. Phase II study evaluating the combination of antiangiogenic and chemotherapy are ongoing (gemcitabine sunitinib) (gemcitabine, capecitabine, bevacizumab).

Conclusion

The sarcomatoid renal cell carcinoma is not a separate entity but provided histological all renal cell carcinomas. The natural evolution of these kidney tumors is terrible with poor spontaneous prognosis of this tumor. Currently there is no recommendation; but the treatment of sarcomatoid carcinoma of the kidney must be that of renal cell carcinoma at high risk.

Conflicts of interest:

The authors declare no conflict of interest

Author Contributions:

All mentioned authors have contributed to the establishment of this manuscript

Figures

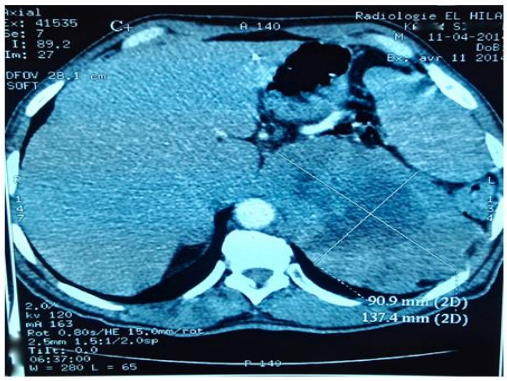

Figure 1. CT image showing an upper pole of the left kidney tissue mass with injection of contrast medium heterodense. This process measure 140x83 mm wide and necrosis zone headquarters.

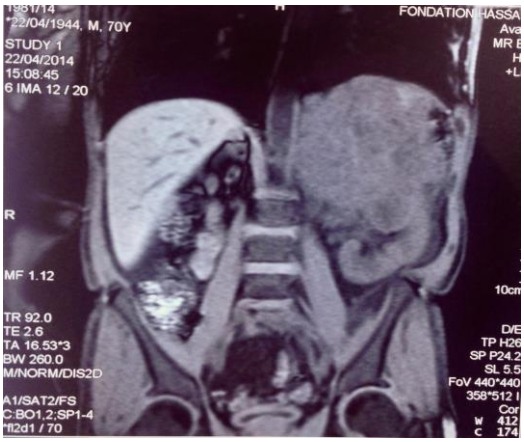

Figure 2. Sagittal imaging magnetic resonance showing a left renal process, infiltrating the renal sinus and renal pedicle guauche.la VCI is free and normal size.

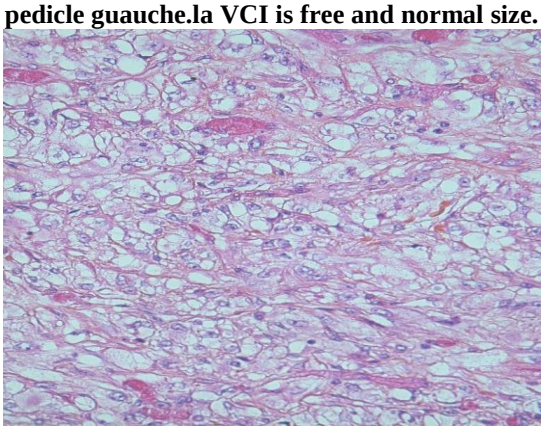

Figure 3. Histology (HES × 400): joint appearance with the tumor is made of spindle cells with sometimes irregular nucleus.

Reference

[1]Farrow GM, Harrison Jr EG, Utz DC, ReMine WH. Sarcomas and sarcomatoid and mixed malignant tumors of the kidney in adults. I Cancer 1968;22:545—50.

[2]Chao, D., Zisman, A., Freedland, S. J., Pantuck, A. J., Said, J. W., & Belldegrun, A. S. Sarcomatoid renal cell carcinoma: basic biology, clinical behavior and response to therapy. In Urologic Oncology: Seminars and Original Investigations.(2001, December) ; 6(6) : 231-238. Elsevier.

[3]Compérat, E., Camparo, P., & Vieillefond, A. [WHO classification 2004: tumors of the kidneys]. Journal de radiologie. (2006) ; 87(9) : 1015-1024.

[4]Lopez-Beltran, A., Scarpelli, M., Montironi, R., & Kirkali, Z. 2004 WHO classification of the renal tumors of the adults. European urology. (2006) ; 49(5) : 798-805.

[5]Mian, B. M., Bhadkamkar, N., Slaton, J. W., Pisters, P. W., Daliani, D., Swanson, D. A., & Pisters, L. L. Prognostic factors and survival of patients with sarcomatoid renal cell carcinoma. The Journal of urology. (2002) ; 167(1) : 65-70.

[6]de Peralta-Venturina, M., Moch, H., Amin, M., Tamboli, P., Hailemariam, S., Mihatsch, M., ... & Amin, M. B. Sarcomatoid differentiation in renal cell carcinoma: a study of 101 cases. The American journal of surgical pathology. (2001) ; 25(3) :275-284.

[7]Pal, S. K., Jones, J. O., Carmichael, C., Saikia, J., Hsu, J., Liu, X., ... & Lau, C. Clinical outcome in patients receiving systemic therapy for metastatic sarcomatoid renal cell carcinoma: A retrospective analysis☆. In Urologic Oncology: Seminars and Original Investigations. 2013 ;31 (8) :1826-1831. Elsevier.

[8]Golshayan, A. R., George, S., Heng, D. Y., Elson, P., Wood, L. S., Mekhail, T. M., ... & Rini, B. I. Metastatic sarcomatoid renal cell carcinoma treated with vascular endothelial growth factor–targeted therapy. Journal of Clinical Oncology. (2009) ; 27(2) : 235-241.

[9]Shuch, B., Bratslavsky, G., Shih, J., Vourganti, S., Finley, D., Castor, B., ... & Belldegrun, A. S. Impact of pathological tumour characteristics in patients with sarcomatoid renal cell carcinoma. BJU international. 2012 ; 109(11) : 1600-1606.

[10 Ljungberg, B., Campbell, S. C., Cho, H. Y., Jacqmin, D., Lee, J. E., Weikert, S., & Kiemeney, L. A. The epidemiology of renal cell carcinoma. European urology. (2011) ; 60(4) : 615-621.

[11]Shuch B, Said J, La Rochelle JC, Zhou Y, Li G, Klatte T, et al. Cytoreductive nephrectomy for kidney cancer with Carcinomes rénaux à contingent sarcomatoïde 437 sarcomatoid histology—is up-front resection indicated and, if not, is it avoidable? J Urol. 2009; 182 :2164-71.

[12]Cheville, J. C., Lohse, C. M., Zincke, H., Weaver, A. L., Leibovich, B. C., Frank, I., & Blute, M. L. Sarcomatoid renal cell carcinoma: an examination of underlying histologic subtype and an analysis of associations with patient outcome. The American journal of surgical pathology. (2004) ; 28(4) : 435-441.

[13]Ljungberg, B., Cowan, N. C., Hanbury, D. C., Hora, M., Kuczyk, M. A., Merseburger, A. S.,... & Sinescu, I. C. EAU guidelines on renal cell carcinoma: the 2010 update. European urology. (2010) ; 58(3): 398-406.

[14]Patard JJ, Baumert H, Correas JM, Escudier B, Lang H, Long JA, et al. Recommendations Onco-Urology 2010: Kidney cancer. Prog Urol.2010; 20(Suppl. 4) :S319—39.

[15]Haas, N. B., Lin, X., Manola, J., Pins, M., Liu, G., McDermott, D.,.. & Dutcher, J. A phase II trial of doxorubicin and gemcitabine in renal cell carcinoma with sarcomatoid features: ECOG 8802. Medical Oncology. (2012) ; 29(2) :761-767.