International Journal of Academic Health and Medical Research (IJAHMR)
ISSN: 2643-9824
Vol. 8 Issue 4 April - 2024, Pages: 231-233

Hybrid Renal Cell Carcinoma With Clear Cells And Chromofobe Cells: A Case Report

Cheikh Saad Bouh Khatraty[1], Omar taleb[1], Nabil Alaoui Mhammedi[1], laila TAHIRI [2],Mustapha Ahsaini[1], Soufiane Mellas[1], Jalal Eddine El Ammari[1], Mohammed Fadl Tazi[1], Mohammed Jamal Fassi[1],and Moulay Hassan Farih[1]

[1]department of urology, University Hospital Hassan II, Fez, Morocco
[2] Pathology department, University hospital Hassan II, fez Morocco

***Abstract**: Kidney cancer accounts for 2 to 3% of adult cancers. The most frequent histological type is clear cell carcinoma. We present here a case of a very rare histological type an hybrid renal cell carcinoma with clear cells and chromophobe cells in an 83-year-old patient.*

Introduction :

Kidney cancer accounts for 2 to 3% of adult cancers.
The most frequent histological type is clear cell carcinoma.
We present here a case of a very rare histological type an hybrid renal cell carcinoma with clear cells and chromophobe cells in an 83-year-old patient.

Clinical case :

83-year-old patient
Followed for ischemic heart disease on treatment who consulted for management of macroscopic hematuria.
Clinical examination revealed a left lumbar tenderness without lumbar contact.
Biological analysis showed: Hb 8, WBC: 11K, Creat: 17, Na+: 137, K+: 4.4, ECBU: microscopic hematuria with negative culture.
A renal ultrasound scan was performed, suggesting a heterogeneous left renal cystic lesion that was difficult to characterize.
An abdomino-pelvic MRI was therefore carried out, revealing a tumoral process in the posterior lip of the left kidney with T1 iso signal, T2 hypo signal, diffusion restriction measuring 105*83*110mm classified T3N0, the thoracic CT scan was without abnormalities.
A total left enlarged open nephrectomy was performed with simple postoperative course.
Anatomopathological and immunohistochemical studies were compatible with a hybrid tumor consisting of a clear cell carcinoma and a chromophobe carcinoma. (figures 1,2,3)
Follow-up was unremarkable, with no recurrence or distant metastases.

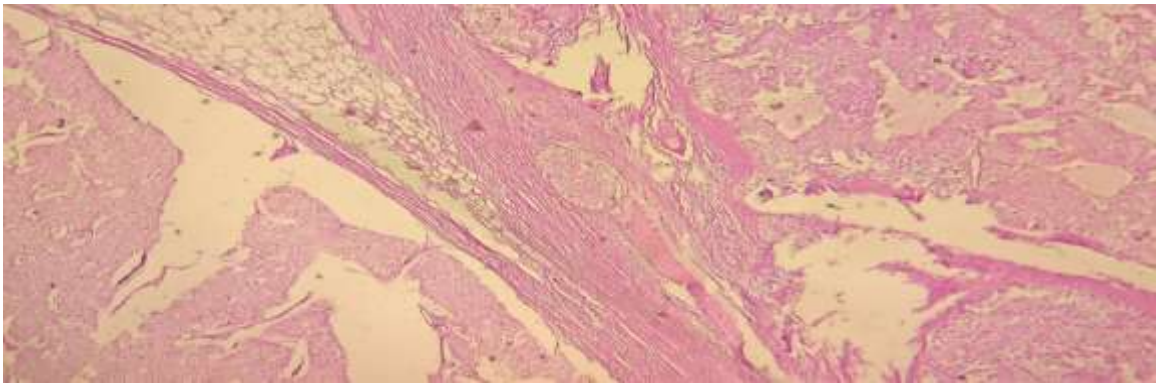

Figure 1: Carcinome mixte à cellules claires (à droite) et chromophobe (à gauche) (HESx 100)

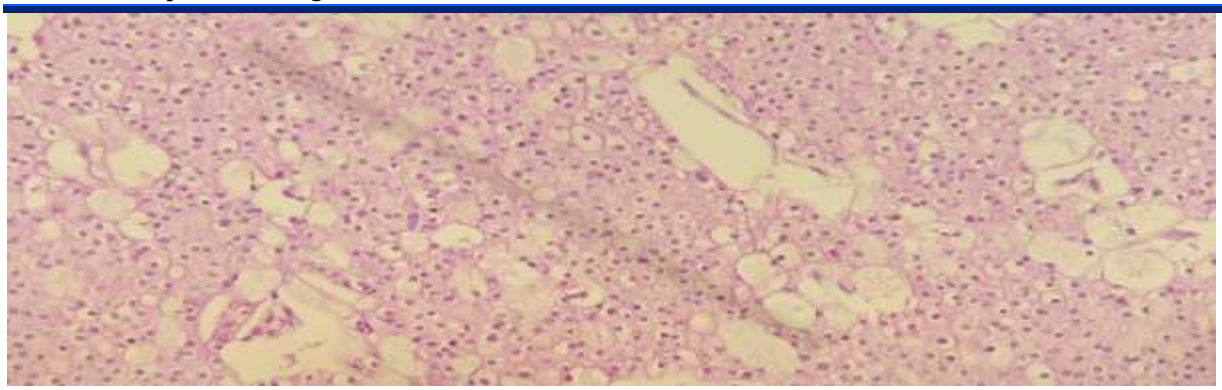

Figure 2 : Carcinome mixte à cellules claires et chromophobe : composante chromophobe (HESx 200)

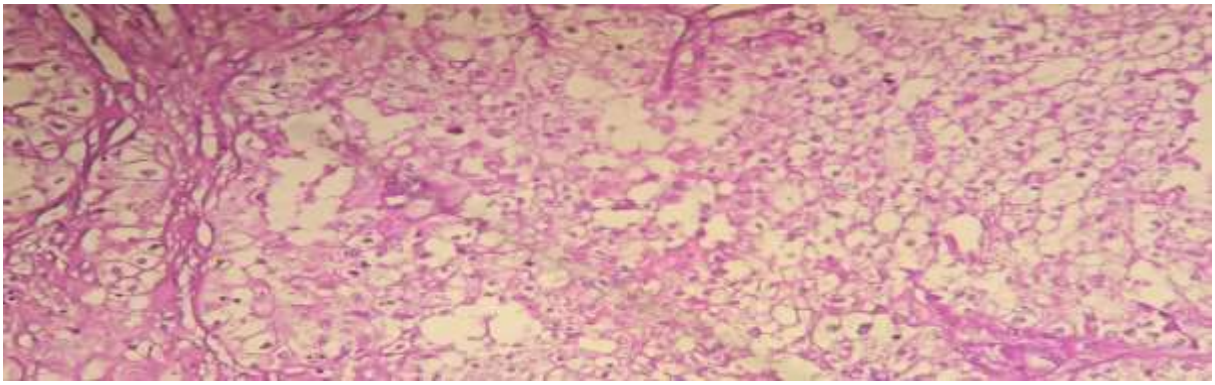

Figure 3 : Carcinome mixte à cellules claires et chromophobe (composante à cellules claires) (HESx 200)

Discussion :

This case is particularly interesting because of the rarity of the histological diagnosis.
In the literature, there are very few published cases of hybrid tumors combining clear-cell and chromophobe carcinomas.

The incidence of hybrid tumors is estimated at around 1% (1).
There is no clinical or radiological specificity to suggest the diagnosis of hybrid tumor.
Diagnosis is made postoperatively by anatomopathological study, but above all by immunohistochemistry. The markers used for positive diagnosis are CK, CD10, PAX2, PAX8, RCC and vimentin. TFE3 , CK7 and AMCAR (2) are used to differentiate between clear-cell and chromophobe carcinomas.
In our case, some foci expressed CK7 and CD117 without expressing vimentin and CD10 . Other tumor foci expressed vimentin and CD10 and did not express CK7 and CD117 . Racemase was not expressed. This was in favour
of a hybrid tumor composed of a clear-cell carcinoma (isup grade 2) and a chromophobe carcinoma.
Follow-up of locally advanced tumors is based on risk stratification of recurrence according to the UISS system taking into account TNM, ISUP and ECOG (3).
In our case, the patient is at intermediate risk, requiring clinical monitoring with measurement of GFR + Blood Pressure and a TAP CT scan for 10 years, every 6 months for 2 years, then every year for 4 years, then every 2 years for 4 years (4).
Our patient's follow-up to date shows no recurrence or metastasis.

Conclusion :

Hybrid tumors are a very rare histological subtype of kidney cancer.
Studies and interdisciplinary collaboration are needed to identify the prognosis of these tumors.

References :

1. **KT Mai, Dhamanaskar E, Stinson BW.** *Hybrid chromophobe renal cell carcinoma. Pathology Research and Practice. 2005, 201.*
2. **Steven S. Shen, Luan D. Truong, Marina Scarpelli, Antonio Lopez-Beltran, (2012).** *Role of Immunohistochemistry in Diagnosing Renal Neoplasms: When Is It Really Useful?. Archives of Pathology & Laboratory Medicine. April 2012, Vol. 136, No. 4, pp. 410-417.*
3. **Cindolo L, Chiodini P, Gallo C, Ficarra V, Schips L, Tostain J, et al.** *Validation by calibration of the UCLA integrated staging system prognostic model for nonmetastatic renal cell carcinoma after nephrectomy. Cancer. juill 2008;113(1):65-71.*
4. **P. Bigot, P. Barthelemy, R. Boissier et al.** *French AFU Cancer Committee Guidelines - Update 2022-2024: management of kidney cancer ,tableau 9 page 1248.*