

HEMORRHAGIC CYST SIMULATING A RENAL TUMOR; A CASE REPORT

*Nabil Alaoui Mhammedi, Othman Chama, Mosatafa Ahssaini, Soufiane Mellas, Jalal Eddine El Ammari, Mohamed Fadl Tazi, Jamal Mohammed El Fassi and Hassan MY Farih

Yonne.

*Corresponding Author: Nabil Alaoui Mhammedi

Yonne.

Article Received on 21/07/2022

Article Revised on 11/08/2022

Article Accepted on 31/08/2022

SUMMARY

Cystic tumors of the kidney are tumors proliferations excavated by cavities. some malignant kidney tumors may have the features of a benign renal cyst . it's difficult to determinate how to deal with this problem affection . very few cases have been reported in the literature but do not have a standard therapeutic approach . the renal hemorrhagic cyst does not present any particular clinical features. pseudo-tumoral expression results in a wide exertion, as long as the diagnosis is not recognized preoperatively.

INTRODUCTION

Kidney cysts are a heterogeneous group of lesions with a variety of clinical and radiological features.^[1] Ultrasound, CT and MRI are currently the key examinations for the diagnosis of renal cysts. For three decades, the BOSNIAK classification has been the essential tool for the diagnostic approach of supra-centimetric cystic masses of the kidney on imaging.^[2]

The diagnosis of certain lesions that are difficult to classify or remain undetermined on the basis of CT findings alone may benefit from a multimodal approach combining CT, ultrasound, and magnetic resonance imaging (MRI) findings. Our work aims to demonstrate that some apparently malignant tumors can mimic benign cystic lesions; therefore, very good and careful imaging analysis will allow better characterization of these lesions and spare patients potentially avoidable operative morbidity.

OBSERVATION

The patient A. N., 67 years old, renal insufficiency, diabetic and hypertensive nephropathy, followed for an ACFA treated by anticoagulation was admitted for right lumbar pain evolving since 1 month without other associated signs. The clinical examination was unremarkable except for a fairly good general condition.

Ultrasound identified a right renal mass at the inferior pole, solid-cystic of 9 cmX6.5 cm with a suspicious appearance of malignancy (figure 1).



Figure 1: Renal ultrasound: lower polar right renal tumor mass.

The CT scan showed the same lesion of mixed density without signs of locoregional invasion (Figure 2).

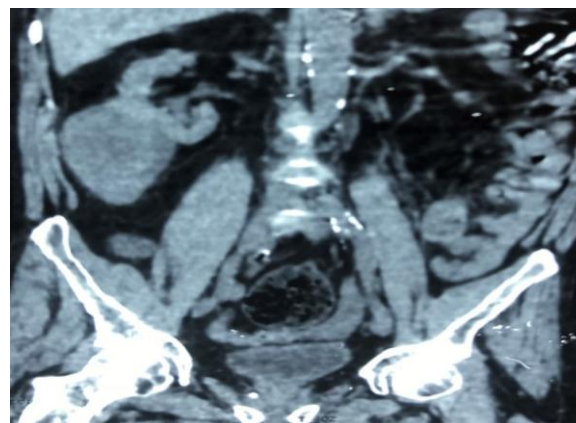


Figure 2: CT scan without injection: inferior polar renal tumor mass of mixed density measuring 9x6cm without loco regional invasion.

This was complemented by an MRI that described a formation with two different components, one of which was peripheral fluid and the other of a difficult to specify nature (Figure 3).

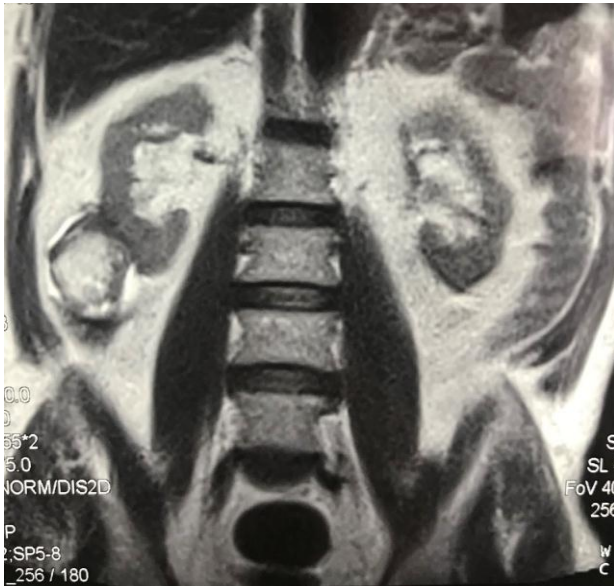


Figure 3: Abdominal MRI; round formation with a double fluid component and another of a difficult to determine nature.

A partial nephrectomy was performed by lumbar approach. The postoperative course was simple. the redon was removed at d +4. The patient was discharged after 6 days of post-operation.

Macroscopic examination showed a well-limited specimen, with a thickened brownish material surrounded by a fibrous condensation (figure 4).



Figure 4: Macroscopic appearance of the mass after partial nephrectomy.

Histological examination came back in favor of a cyst largely remodeled by hemorrhage with secondary fibrous and inflammatory remodeling (figure 5,6).

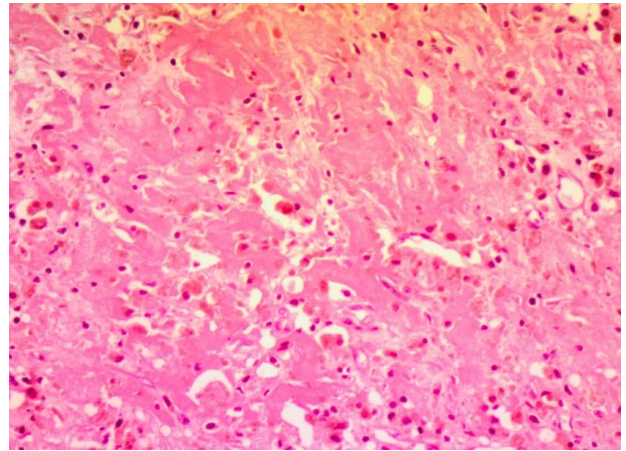


Figure 5: contents of the cyst with a hemorrhagic appearance and containing siderophages.

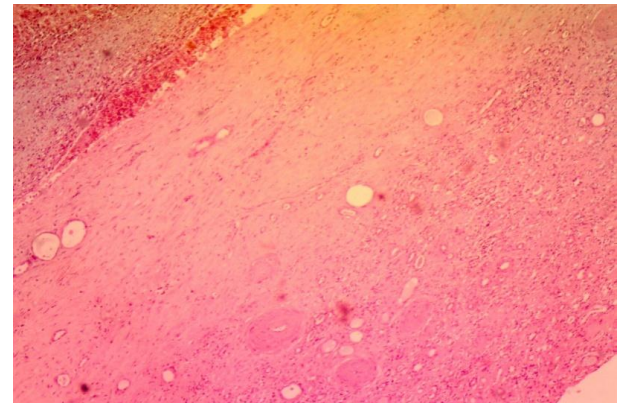


Figure 6: Renal cyst with fibrous wall and hemorrhagic content.

DISCUSSION

Hemorrhagic cyst is a very rare condition,^[1] its incidence is about 6%.^[3] The cause is most often unknown, however, a disorder of hemostasis and/or trauma should be sought. The vast majority of cystic renal masses are benign, however, malignant tumors may have a cystic appearance. The diagnostic difficulty of renal hemorrhagic cyst lies firstly in its rarity and secondly in the absence of specific clinical signs. It can be asymptomatic and discovered by chance or manifested by lumbar pain, as in the case of our patient who complained of right flank pain. The classification of Morton Bosniak,^[2] makes it possible to differentiate non-suspicious lesions (type I and II), suspicious lesions (type III and IV) requiring excision and lesions requiring follow-up (type IIF). The relationship between the Bosniak score and the probability of malignancy has been widely demonstrated in the literature.^[3] Some renal lesions have been described on imaging as malignant tumors while anatomopathological study discovers another non-tumorous lesion.

Doh et al.^[4] reports a case of renal textiloma simulating a renal pseudotumor of anatomopathological discovery in a young patient with a history of left nephrolithotomy by lombotomy who complained of lumbar pain, the lesion was described on the CT scan as a renal cyst Bosniak III whose treatment could only be surgical.

Morocco is a tuberculosis endemic country which constitutes a real public health problem. Urogenital tuberculosis can take deceptive forms; the pseudotumoral form is exceptional and difficult to diagnose. Sarf et al.^[5] describe a case of renal tuberculosis whose radiological aspects raise the diagnosis of a neoplastic renal mass without adenopathy or vascular invasion. An enlarged nephrectomy was performed by a subcostal. Anatomopathological study revealed granulomatous epithelio-giganto-cellular foci rich in lymphoplasmocytes of nodular organization with foci of abcedations, evoking tuberculosis.

Two cases of inflammatory pseudotumors have been reported by Dakir et al.^[6] whose imaging studies suggested a renal tumor, one patient underwent a lumpectomy while the other benefited from a surgical biopsy due to the very hard and inextirpable nature of the disease; The results of the anatomopathological study were in favor of an inflammatory process without signs of specificity or malignancy; The evolution under anti-inflammatory treatment was favorable with disappearance of the symptoms and a restitution ad integrum of the kidney.

Is there a kidney cancer that simulates a benign-looking cyst? Sow.A et al.^[7] report a case of a patient who complained of left lumbago without other associated signs and whose imaging (ultrasound, uroscanner) showed several cystic lesions in both kidneys , The largest cyst was located in the left kidney, estimated at 7/6 cm, this cyst was classified as Bosniak IIF or III, the other existing cysts were qualified as Bosniak I. The patient underwent a nephrectomy because of the pain and the difficulties during the operation (the major cyst was very close to the vessels).

Histopathology of the specimen confirmed a Fürhman grade 2 papillary carcinoma of the kidney.

CONCLUSION

Several benign lesions of the kidney such as hemorrhagic cyst can have a malignant appearance. This implies careful interpretation of the available imaging modalities, particularly CT and MRI. We recommend surgery without hesitation if there is any doubt about renal cystic lesions suspected of malignancy.

CREDENTIALS

1. Affections kystiques du rein Cystic disease of the kidney N.-B. Delongchamps, M. Peyromaure *

2. Glassberg KI. Renal dysplasia and cystic disorders of the kidney. In: Walsh PC, Retick AB, Stamey TA, Vaughan Jr. ED, editors. *Campbell's urology*. Philadelphia: WB Saunders, 1992; 1443.
3. Affections kystiques du rein Cystic disease of the kidney N.-B. Delongchamps, M. Peyromaure * Service d'urologie, hôpital Cochin, 27, rue du Faubourg-Saint-Jacques, 75014 Paris, France.
4. Doh K, Et al. Un Cas De Textilome Renal Simulant Une Tumeur De Découverte anatomopathologique. *AfrJUrol* <http://dx.doi.org/10.1016/j.afju.2016.12.002>, 2017.
5. Un nouveau cas de tuberculose rhale ii forme pseudotumorale I. Sarf, Z. Dahami", M. Dakir, R. Aboutaieb, A. El Moussaoui, A. Joual, M. El Mrini, F. Meziane, S. Benjelloun Service d'urologie, CHU Ibn Rochd, Casablanca, Mum, 2000.
6. Les pseudotumeurs inflammatoires du rein : à propos de 2 cas Mohamed DAKIR (1), Abdellatif TAHA (1), Ismail SARF (1) Hicham ATTAR (2), Rachid ABOUTAIEB (1), Fathi MEZIANE (1) (1) Service d'Urologie, (2) Service d'Anatomie pathologique, CHU Ibn Rochd, Casablanca, Maroc.
7. Sow AA, Somuah T, Tazi K, et al. Renal cancer mimicking a renal cyst: A case report. *Urol Androl Open J.*, 2017; 1(2): 29-31. doi: 10.17140/UAOJ-1-108.