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Kidney Cancer Revealed by Wunderlich's Syndrome: One Case at the Teaching Clinic of Urology CNHU-HKM of Cotonou

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Abstract

Wünderlich's syndrome is a rare clinical occurrence whose symptom is Lenk's triad: sudden lumbar pains, signs of collapse and mass lumbar. We report a case of Wünderlich's Syndrome, the first manifestation of renal clear cell carcinoma in a 63-year-old man. The emergency treatment was a total left nephrectomy.

Keywords: Kidney – Cancer – Wünderlich's syndrom – Total Nephrectomy.

Introduction

The expression of a renal tumor in a retroperitoneal hemorrhage mode is referred to as Wünderlich's syndrome [1]. This syndrome is rare [2] and its symptom is a Lenk's triad. It is a real surgical emergency because it can be life-threatening [3]. Delay in diagnosis and therapy is fatal for the patient [4].

This work reports a case received at the Teaching Clinic of Urology-Andrology of CNHU-HKM Cotonou.

Observation

It was about a 63-year-old hypertensive patient on treatment. He was admitted to the emergency department of the National University Hospital Hubert Koutoukou Maga (CNHU-HKM) of Cotonou, Benin, for left lumbar pain. The anamnesis noted a sudden, intense, abdominal pain. It had been feeling for the last 12 hours, evoking a non-febrile nephritic colic. No hematuria or other urinary disorders were noted. There was no notion of recent trauma or addiction to smoking.

On clinical examination, it was noted that the general condition was preserved, the mucous membranes colored, and the temperature at 37° C. The palpation found a painful left lumbar arch associated with a more pronounced diffuse defense on the left flank. Elsewhere, the clinical examination was without particularities. On imaging, the abdominal ultrasound showed a heterogeneous mass of 15cm x 9cm developed in contact with the lower pole of the left kidney with a thin blade of fluid effusion in the interspleno-renal space. The uroscanner revealed a cystic haemorrhagic lesion (type 3 of Bosniak) developed at the expense of the lower pole of the left kidney which measured 12.5cmx9cm [Figure 1]. Associated with it was a large fluid infiltration of the perirenal compartment of the retroperitoneum. The hemoglobin level was 12.0 g/dl, the ionogram and the hemostasis balance were normal. Under medical supervision, the patient presented a haemorrhagic shock chart: pulse at 110 beats/min, blood pressure 85/65 mm Hg with abdominal distension. The digital rectal examination noted a painful bulge in the Douglas cul-de-sac, making it possible to make the diagnosis of peritoneal haemorrhage by rupture of the renal cyst. Surgical exploration performed with medial xyphopubian laparotomy revealed a haemoperitoneum of moderate abundance and an expansive retro peritoneal hematoma. The left kidney was hypertrophied with a hemorrhagic cyst broken at its lower pole. Left total nephrectomy was performed followed by peritoneal lavage and drainage [Figure 2]. The patient benefited from the transfusion of 4 bags of whole blood.

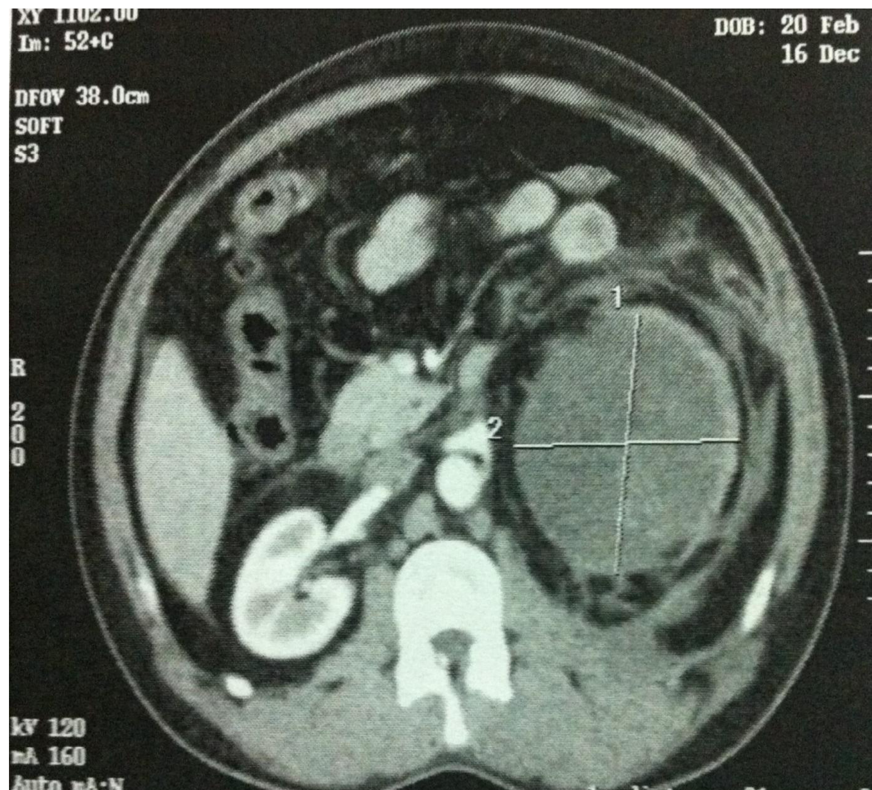

Figure 1. *CT scan showing cystic hemorragic lesion (type 3 of Bosniak)*

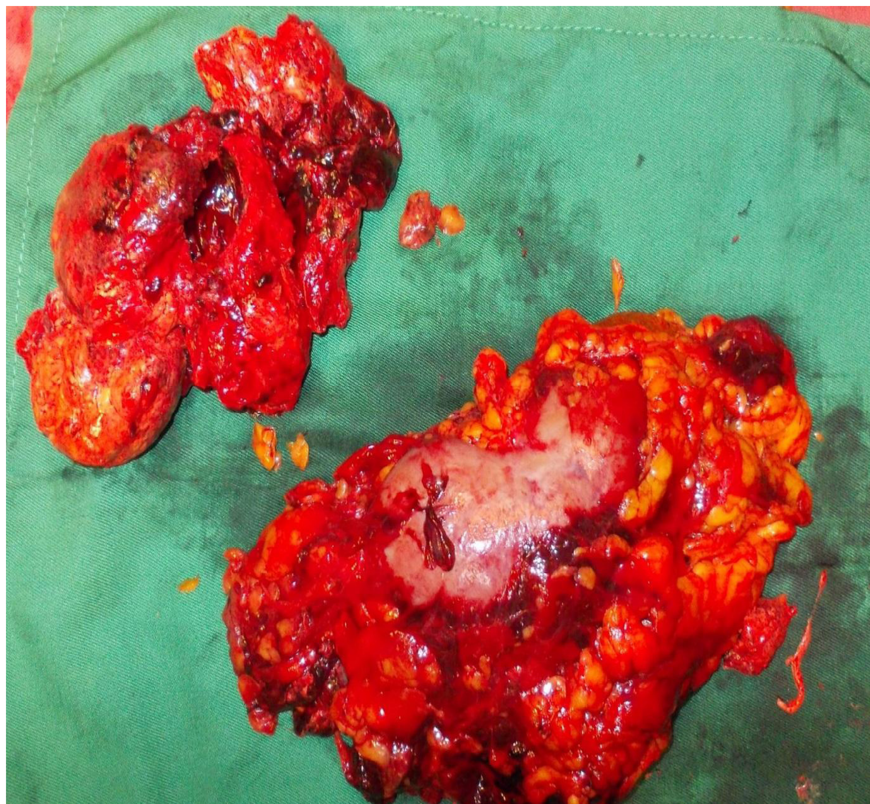

Figure 2. *nephrectomy piece (kidney+ cyst wall)*

The immediate operative follow-up was simple and the patient was exeat on post-operative day7. Renal function after nephrectomy was normal. Histopathological examination of the operative specimen revealed renal cell carcinoma with clear cells. After 1 year of follow up, the general condition was good.

Discussion

The spontaneous extracapsular hematoma of the renal box was described for the first time in 1700 by Bonet reported by Albi [5]. Wünderlich made the first clinical description in 1856 and Coenen was the first to use the term Wunderlich Syndrome in 1910 [5].

This clinical event is rare. About 300 cases described in the literature [2]. Its symptom is an insidious, or most often acute, symptomatology. This symptomatology can take the form of Lenk's classic triad: brutal lumboabdominal pain, poor general condition with signs of hypovolemic shock and one and lumbar mass [5]. The diagnostic problem can be that of an acute abdomen. When on the left, they may be taken for colitis, a diverticulitis of the colon, pancreatitis or splenomegaly. Nowadays, imaging helps to correct the diagnosis [6]. Ultrasound, CT scan and even angiography can be performed [2, 5]. Nevertheless, the CT scan remains the key examination of the diagnosis and gives the opportunity to confirm retroperitoneal haemorrhage [3], to know the type of hematoma and the presence of active bleeding [2].

In our case, the diagnosis of retroperitoneal hematoma was discussed clinically and confirmed intraoperatively. In our context of work, the scanner is not always available in emergency and the angiography is not yet available.

The main etiologies of Wünderlich's syndrom are tumoral, vascular, inflammatory and cystic [5]. The most common are angiomyolipoma [7, 8] and clear cell renal carcinoma as found in our case.[7, notre cas].

Therapeutically, we performed a total nephrectomy. But various attitudes are adopted and are function of the clinical condition of the patient, etiology and the technical platform available both diagnostically and therapeutically. The various attitudes mentioned in the literature are as follows: total nephrectomy [our case, 2, 3, 7, 8], partial nephrectomy [3, 5, 7], selective angioembolization in the acute phase to stop bleeding [2, 3, 5, 7, 8], perirenal packaging with temporary abdominal closure [3], laparoscopic treatment [9]

Conclusion

Emergency nephrectomy for renal cancer is an exception, nevertheless required in case of a picture of cataclysmic haemorrhage. The syndrome of Wünderlich is an example. When technical set-up, patient condition and etiology allow, selective arterial embolization should be preferred over total nephrectomy or at least partial nephrectomy for conservative purposes.

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