Case (033) Wünderlich syndrome: a case report of spontaneous renal

haemorrhage.

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CASE PRESENTATION

A 40-year-old female patient arrived at the emergency department with a few hours of abdominal pain and anaemia. The patient begins with clinical hemodynamic instability that requires completing the study with computed tomography (CT).

Intravenous CT scan, arterial and portal phases, revealed a heterogeneous exophytic mass located in the right kidney with a large subcapsular and perirenal hematoma. Signs of arterial active bleeding were observed inside the hematoma.

These findings were compatible with renal neoplasia and retroperitoneal hematoma. An urgent haemostatic renal arterial embolization was performed. (Image1) Due to the persistence of signs of hemodynamic instability, finally, an urgent nephrectomy was required. After the intervention, the patient evolved favourably. The pathology report on the surgical specimen was a renal cell carcinoma.

DISCUSSION

Wünderlich syndrome or spontaneous renal haemorrhage is a rare and potentially fatal disease. It is due to the presence of a spontaneous and non-traumatic hematic collection in the renal retroperitoneal space.

Renal expansive processes are the most frequent cause of Wunderlich's syndrome (adenocarcinoma, angiomyolipoma, ...). Other causes described in the literature are vascular causes (polyarteritis nodosa, arteriovenous malformations ...), infectious causes (pyelonephritis/abscesses, tuberculosis ...) or other such as portal shunts. Frequently, symptoms present abruptly due to a massive retroperitoneal haemorrhage with the typical Lenke triad: intense pain in the affected renal fossa, palpable mass and hemodynamic instability.

CT is the better complementary exploration to detect haemorrhage because it may establish an etiological diagnosis. If CT is not accurate for establishing the origin of the bleeding, the renal arteriography may be useful, since in addition to being diagnostic it may be therapeutic when carrying out embolizations in lesions of vascular origin. The treatment can be conservative, nephrectomy or selective embolization of the bleeding vessel, depending on the aetiology and the evolution of the process.

CONCLUSION

The Wünderlich syndrome is a rare entity that can endanger the patient's life, so it is important to keep it in mind when there is compatible symptomatology. The role of the image is decisive in its diagnosis, its aetiology and in indicating its treatment.

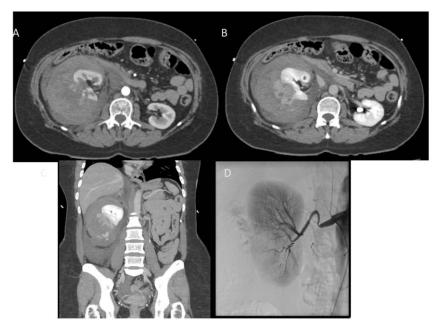


Image 1. A: Arterial phase intravenous contrast CT shows contrast extravasation from the lower pole renal arteries of the right kidney, with a big adjacent perirenal-subcapsular hematoma. B: Portal phase intravenous contrast CT shows a diffuse increase in density of the hematoma in relation to its filling by intravenous contrast. C: Coronal view of the arterial phase. D: Urgent arteriography image in which intravenous contrast extravasation can be seen beyond the renal parenchyma and a stent in renal arterial branches to attempt to control bleeding.

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