

Case	(539) Wunderlich syndrome
Authors	P. Rey Segovia, D. Gea Martos, I. Sánchez Serrano, M. Ato González, M. Martínez Cutillas, A. Jiménez.
Centre	Hospital Universitario Virgen De La Arrixaca.

## CASE PRESENTATION

A 76-year-old woman was attended at emergency department due to dizziness and oliguria of 2 days of evolution accompanied by very intense abdominal pain at the level of the left flank that radiates to the back. Associated deterioration of general condition and sweating. Supra-therapeutic INR of 8.37 and Hb of 6.2 was observed.

Urgent abdominal CT was performed with intravenous contrast and the main findings were: extensive retroperitoneal perirenal and left retroperitoneal hematoma (500cc) with active arterial bleeding on its lower margin. It conditions expansion of the left perirenal space with mass effect and displacement of the renal parenchyma and ipsilateral adrenal gland.

## DISCUSSION

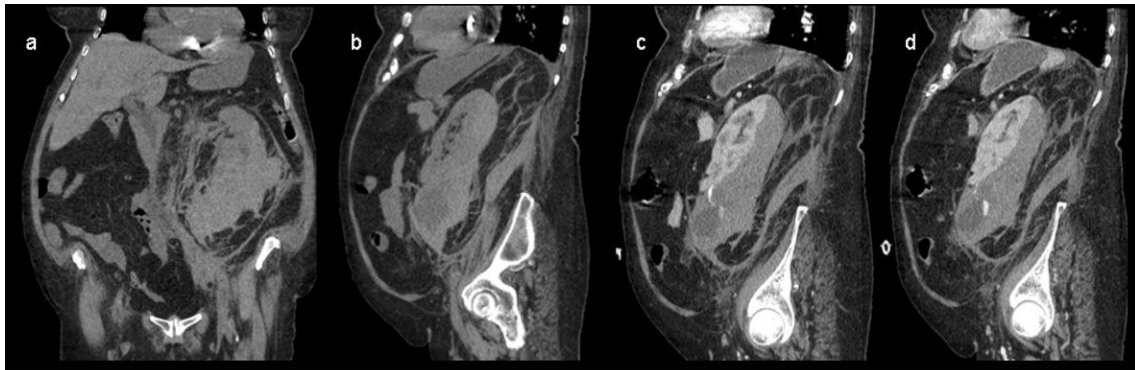
Spontaneous retroperitoneal hemorrhage (HRE) is an infrequent clinical syndrome of multifactorial etiology. The main cause is renal tumors, followed by vascular and inflammatory diseases. Several factors, such as heparinization during dialysis, functional platelet abnormalities, intimal arterial fibrosis or oral anticoagulant therapies are often combined to cause a spontaneous kidney hematoma.

The diagnosis of this syndrome will be based on clinical symptoms, physical examination, analytical data and radiological study. There are no pathognomonic signs or symptoms, with lumboabdominal pain being the main symptom. The most relevant analytical parameters are the decrease in hemoglobin and hematocrit, leukocytosis and increased levels of urea and creatinine.

The current radiological tests (mainly CT) should be the diagnostic pillar of this pathology, not only detecting the retroperitoneal hematoma but also providing an etiological diagnosis that allows us to avoid unnecessary surgical explorations. The therapeutic management will depend fundamentally on the hemodynamic situation of the patient and on the etiology of the bleeding.

## CONCLUSION

The atraumatic renal hemorrhage is an entity, of multiple etiology and difficult to identify given its clinical similarity with other pathologies, however, it can be potentially fatal. For this reason we must know its existence and its potential causes. The index of suspicion should be high in patients admitted to the emergency department with sudden pain in the flank, anemia and hemodynamic instability and we should perform an abdominopelvic CT.



(a,b) Coronal and sagittal unenhanced (c) sagittal arterial phase (d) sagittal portal venous phase reformatted images show a large predominantly hyperdense left perirenal and retroperitoneal collection, with a blood level in its lower margin compatible with perirenal hematoma. It measures approximately 19 x 10 x 7.6 cm (CC x T x AP) with an approximate volume of 500 cc. It conditions a moderate mass effect on the left renal parenchyma, as well as a large expansion of the left perirenal space with anterior displacement of the left adrenal gland. In the arterial phase, a focus of extravasation with a contrast jet is detected as a direct sign of active bleeding located in the left lower renal pole towards the thickness of the hematoma. Linear striation of perirenal fat and thickening of the left perirenal fascias with fluid accumulation of up to 2.7 cm in the posterior fascia and in Zuckerland and thickening of the ipsilateral psoas.

## BIBLIOGRAPHY

- Katabathina VS, Katre R, Prasad SR, Surabhi VR, Shanbhogue AK, Sunnapwar A. Wunderlich syndrome: cross-sectional imaging review. J Comput Assist Tomogr. 2011;35(4):425-33.
- Albi G, del Campo L, Tagarro D. Wunderlich's syndrome: causes, diagnosis and radiological management. Clin Radiol. 2002;57(9):840-5.