Case (182) Abdominal aortic aneurysm complicated with aorto-letf

retroaortic renal vein fistula: case report

Authors F. Galván, M. Parada, J. Jurado, P. Gómez-millán, M. Espinosa De

Los Monteros, F. Álvarez.

Centre Hospital Universitario Vírgen Del Rocío.

CASE PRESENTATION

We present the case of a 68-year-old man who came to the emergency with symptoms of abdominal pain and hematuria, with analytical deterioration of renal function. The abdominal ultrasound showed an abdominal aortic aneurysm (AAA) as an incidental finding.

The TC-angiography revealed an arteriovenous (A-V) aorto-left renal vein fistula with simultaneous contrast filling of the aneurysm, the left renal artery and the left retroaortic renal vein.

The left kidney was edematous with no contrast uptake. The aneurysm was urgently repaired by an aorto biiliac endoprosthesis replacement, sealing the fistula and improving renal function progressively.

DISCUSSION

Ruptured AAA with fistulization to a nearby venous structure is an uncommon complication. The aorto-cava fistula is the most frequently described in the literature, being the aorto-renal fistula less known. The left retroaortic renal vein represents an anatomical variant that favors this complication.

CONCLUSION

Aorto-renal fistula from an AAA is a rare clinical condition associated with significant morbidity and mortality, so it is very important a high clinical suspicion, an early radiological diagnosis and an urgent surgical intervention in order to preserve renal function and also to save patient's life.

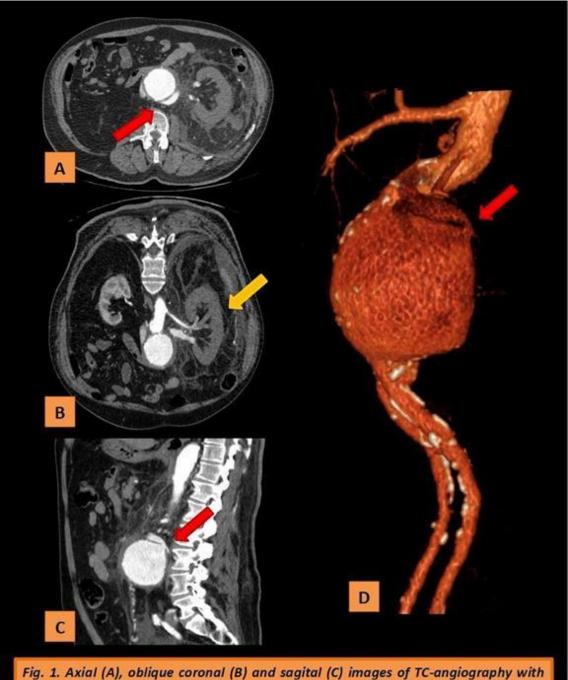


Fig. 1. Axial (A), oblique coronal (B) and sagital (C) images of TC-angiography with 3D reconstruction (D). Aorto-letf retroaortic renal vein fistula (red arrows) with simultaneous contrast filling of the aneurysm, the left renal artery and the left retroaortic renal vein; no contrast uptake of the left kidney (yellow arrow).

BIBLIOGRAPHY

- Mellnick VM, Heiken JP. The Acute Abdominal Aorta. Radiol Clin N Am, 2015; 53: 1209-1224.
- Sever A, Rheinboldt M. Unstable abdominal aortic aneurysms: a review of MDCT imaging features. Emerg Radiol, 2016; Published online.

- Davidovic LB, Markovic MD, Jakovljevic NS, Cvetkovic D, Kuzmanovic IB, Markovic DM. Unusual Forms of Ruptured Abdominal Aortic Aneurysms. Vascular, 2008; 16 (1): 17-24.
- Nakazawa S, Mohara J, Takahashi T, Koike N, Takeyoshi I. Aortocaval Fistula Associated with Ruptured Abdominal Aaortic Aneursysm. Ann Vasc Surg, 2014; 1-5.
- Tanaka H, Naito K, Murayama J,, Ohteki H. Aorto-Left Renal Vein Fistula Caused by a Ruptured Abdominal Aortic Aneurysm. Ann Vasc Dis, 2013; 6 (4): 738-740.
- Van Weel V, Watson A, Fioole B. Ruptured Abdominal Aortic Aneurysm in a Patient with an Aorto-Left Renal Vein Fistula. Ann Vasc Surg, 2014; 28: 493.e11493.e13.