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| Case | (438) Aortocaval fistula, an uncommon complication of abdominal aortic aneurysm |
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## CASE PRESENTATION

A 91-year-old man came to the emergency service after a syncopal episode, with stomachache and headache. In the physical exploration he presented hypotension and a palpable and pulsatile abdominal mass with murmur in the auscultation. DESCRIPTION OF THE FINDINGS:

- The abdomen X ray showed a calcified fusiform dilatation of the abdominal aorta, suggestive of an aneurysm.

- The abdominal non contrast CT showed a fusiform aneurysmal dilatation of the infrarenal aorta which measures 10.5 cm with extension into the iliac arteries (right iliac artery measures 4 cm and left iliac artery 4.3 cm). The aneurysm has mass effect with compression on the inferior vena cava (IVC) and there was loss of demarcation between the aorta and IVC. At the level of L4 vertebra, a communication between the IVC and the left lateral portion of the aorta was observed, with early detection of contrast material in the IVC during the arterial phase, suggestive of an aortocaval fistula. No intra or retroperitoneal fluid was demonstrated.

## DISCUSSION

Diagnosis: Aneurysmal dilatation of the infra-renal abdominal aorta with aorto-caval fistulous communication.

The abdominal aortic aneurysm (AAA) may break into adjacent tissues and viscera, but the formation of aortocaval fistula is a rare complication and has been reported in less than 1% of AAA. The commonest cause is the spontaneous rupture of an atherosclerotic plaque in an existing AAA, but may also be caused after a trauma or iatrogenic.

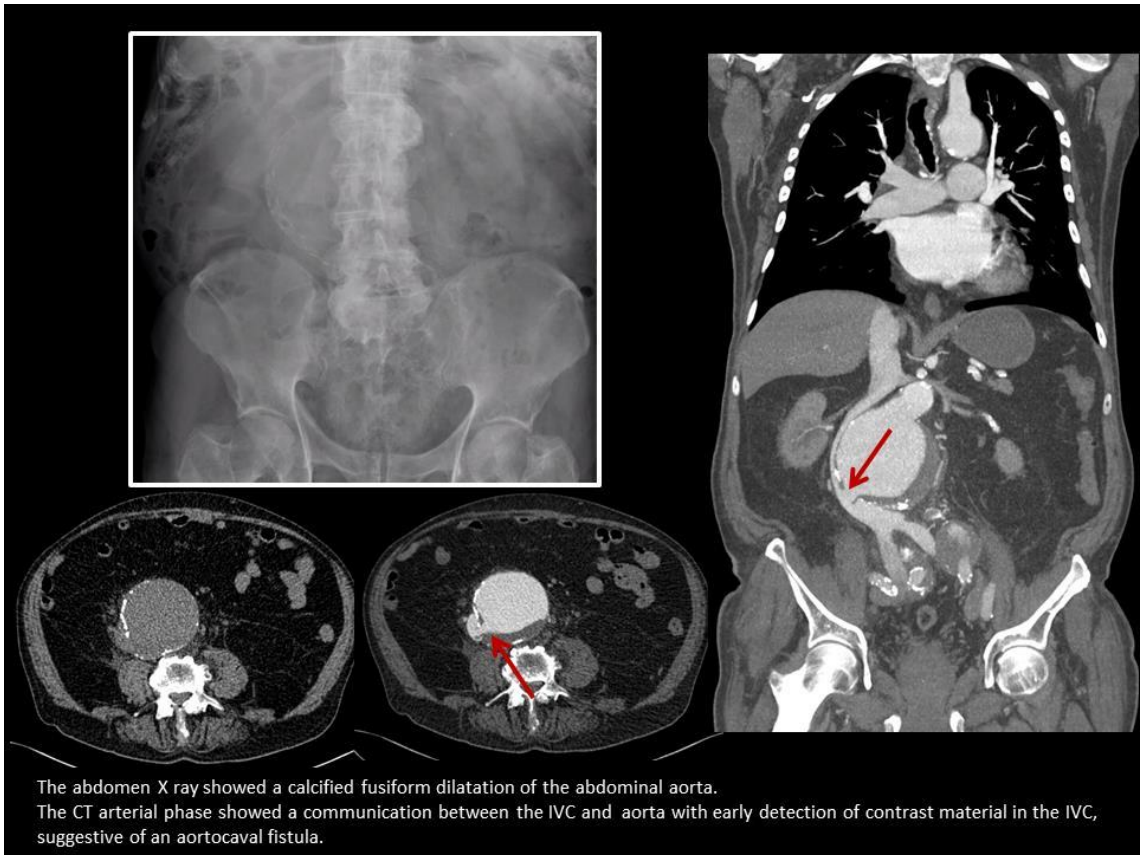
An aortocaval fistula causes a left-right arteriovenous shunt and therefore a high output congestive cardiac failure with tachycardia, leg swelling, abdominal thrill, machinerytype abdominal bruit, renal failure and peripheral ischemia.

Angiography is considered the gold standard but contrast CT is the non-invasive imaging modality of choice for diagnosis.

Both imaging modalities show a fistulous communication between the aorta and IVC, and a simultaneous opacification of IVC. The prognosis depends on an early diagnosis, since the prompt surgical treatment improves survival.

## CONCLUSION

Spontaneous aortocaval fistula is found in less than 1 % of AAA and it is one of the less well recognized complications, but incidence of all AAAs is increasing and therefore so will the incidence of its complications.



The abdomen X ray showed a calcified fusiform dilatation of the abdominal aorta.
The CT arterial phase showed a communication between the IVC and aorta with early detection of contrast material in the IVC, suggestive of an aortocaval fistula.

## BIBLIOGRAPHY

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