

Case	(190) Aortal – iliac aneurysm with following right ilio-iliac arterio-venous fistula development.
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CASE PRESENTATION

A 56-year-old male presented to the Emergency Department with the complaints of dyspnoea. Patient medical history showed multi-morbidity and an aortal-iliac aneurysm with partial thrombosis. On admission laboratory data showed slightly increased inflammation markers and elevated TH-S troponin.

With suspicion of pulmonary embolism (PE) and aortic dissection, computed tomography angiography (CTA) of thorax and abdomen was performed, which showed bilateral PE, abdominal aortic aneurysm with para-aortic fat stranding and free fluid, without active contrast extravasation – signs of possible impending rupture.

The patient was hemodynamically stable and hospitalized for the follow-up. After 4 days, control CTA was performed, which showed fistula between the right common iliac artery and right common iliac vein without contrast leakage (Fig.1-4).

DISCUSSION

Generally, iliac artery aneurysms development is associated with advanced abdominal aortic aneurysm presence. Most aortal-iliac aneurysms are asymptomatic and commonly are diagnosed incidentally unless complications occur.

Rupture of common iliac artery forming arterio-venous fistula to iliac vein secondary to iliac artery aneurysm is a rare complication with a potentially lethal outcome^{1,2}. This uncommon condition may manifest in a diverse symptom spectre as a result of increased venous pressure.

Most common causes of fistula formation are associated to operative, blunt or penetrating trauma complications whereas spontaneous artery rupture into an adjacent venous structure is rare due to atherosclerotic iliac artery^{1,2}.

CONCLUSION

CTA is relatively fast and highly precise diagnostic method tool detecting aortal-iliac aneurysms, as well as recognising related complications associated with increased mortality rate. Emergency CTA potentially minimizes lethal outcomes by early detection and enabling clinicians and surgeons to identify and adjust treatment, hence improving survival rate, especially in life-threatening conditions.



Fig.1 - CTA abdomen reconstruction scans of arterio-venous fistula (arrow). A -abdominal aorta, V- vena cava inferior

BIBLIOGRAPHY

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