Clinical Case: A 38 years old female was emergently admitted to Intensive Cardiologic Care (ICC), reporting a worrying acute ascending back pain. At the angioCT scan: intramural aortic hematoma extended from the right common iliac artery (inlet hole involved iliac bifurcation and hypogastric artery ostium) to the origin of left subclavian artery, due to a retrograde progression of right common iliac artery dissection, in absence of visceral and lower limbs malperfusion. During a back pain recurrence, an urgent angioCT scan showed a dimensional increase of hematoma with initial aspects of aortic lumen compression. We decided for Endovascular treatment (EVT) of the dissection.

Procedure: Two Viabhan (Gore) stent-grafts were positioned with proximal landing zone in right common iliac artery and distal landing zone in external iliac artery and put a vascular plug to embolize right hypogastric artery.

Follow-up: the patient was discharged 10 days after the procedure with antihypertensive and double antiplatelet therapy for 3 months after EVT. The 1-month angioCT scan showed the patency of stent-grafts, proximal right hypogastric artery occlusion with patent pelvic arteries, and a complete regression of intramural hematoma. At 1-year follow-up, the patient is asymptomatic, and stent-grafts are patent without signs of hematoma at CT scan.

Conclusions: Thoraco-abdominal dissection can be the consequence of an iliac dissection. In case of iliac artery dissection, therapeutic options include conservative management, open surgery with prosthetic replacement, and endovascular approaches such as covered or uncovered stent placement, according to symptoms, clinical condition and inlet hole localization. In this case, no outlet hole was identified. The EVT has allowed in a high risk condition an effective treatment of iliac dissection and aortic hematoma with the only inlet hole coverage.

References: