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Isolated Spontaneous Dissection of the Common Iliac Artery: A Rare Case Report

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Abstract | **Case Report**

Spontaneous dissection of peripheral arteries, particularly when not involving the aorta, is a rare clinical entity. This report discusses the case of a 61-year-old male with isolated, spontaneous dissection of the left common iliac artery. The patient presented with moderate abdominal and thigh pain without a history of trauma. Imaging revealed a 1.9 cm dissection of the common iliac artery. A conservative management approach was adopted with symptom resolution. The case highlights the importance of recognizing vascular anomalies and individualizing management.

Keywords: Iliac artery dissection, spontaneous dissection, conservative treatment, vascular anomalies, case report.

INTRODUCTION

Spontaneous dissection of peripheral arteries, without aortic involvement, is rare. Even more exceptional is the non-traumatic, isolated dissection of the common iliac artery over a short segment.

CASE PRESENTATION

We report a 61-year-old male, ex-smoker, with a history of hypertension managed by diet, admitted for sudden, moderate pain in the left flank radiating to the ipsilateral thigh. There was no history of recent trauma or femoral catheterization. General examination was normal aside from mild flank tenderness. Peripheral pulses were intact and symmetrical. Laboratory findings were unremarkable. Abdominal ultrasound was normal. However, abdominal CT angiography revealed a 1.9 cm long, isolated dissection of the left common iliac artery without signs of rupture or thrombosis (Figure 1).

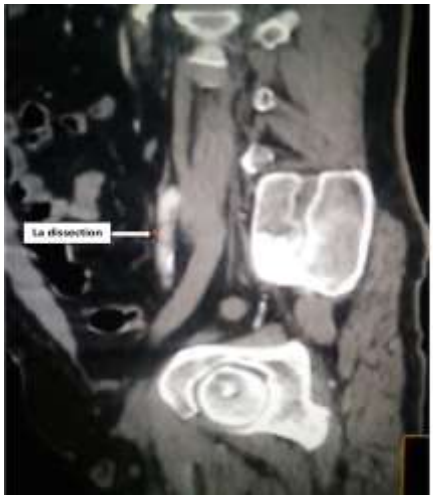

Figure 1A : Sagittal section of a CT angiogram of the aorta and lower limbs showing a short, isolated dissection of the left common iliac artery

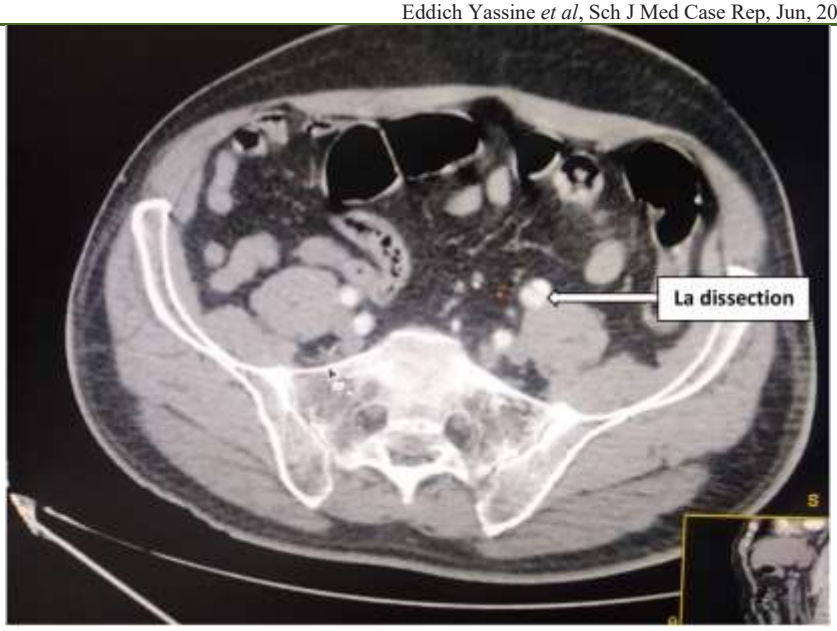

Figure 1B: Cross-sectional view of a CT angiogram of the aorta and lower limbs showing a short, isolated dissection of the left common iliac artery

The patient was managed conservatively with analgesics, antiplatelet therapy, and optimized hypertension control. He experienced complete symptom resolution. A follow-up CT angiogram is scheduled in 6 months.

DISCUSSION

Arterial dissection primarily affects the aorta and carotid arteries. Iliac artery involvement is very rare [1-5]. Non-traumatic, isolated dissection of the iliac artery may be associated with connective tissue disorders such as Marfan syndrome, fibromuscular dysplasia, or cystic medial degeneration [1]. Other cases have been linked to hormonal changes in women or pregnancy [2], atherosclerosis [3], or physical exertion [4].

In this case, given the patient's age and uncontrolled hypertension, atherosclerosis was considered the underlying cause. The dissection was focal and minimally symptomatic, warranting conservative management including analgesia, antiplatelet therapy, and cardiovascular risk factor control.

Due to the rarity of this condition, therapeutic indications remain unclear. Liang et al. reported that asymptomatic patients can be safely managed conservatively [5]. Nonetheless, long-term monitoring is essential as progression to aneurysm is possible. Annual or biannual imaging is advised. Immediate surgical or endovascular repair is indicated in cases of rupture or limb ischemia.

In our patient, a 6-month imaging follow-up is planned. Further treatment will depend on lesion stability: either continued observation or interventional management if progression or aneurysmal changes occur.

CONCLUSION

Isolated iliac artery dissection is extremely rare, often related to connective tissue disease. Emergency intervention is necessary when complications arise, but in stable, minimally symptomatic cases, conservative treatment with close follow-up is a viable option.

Conflict of Interest: None declared.

Funding: None.

Consent for Publication: Informed consent was obtained from the patient.

Highlights:

- Rare case of isolated dissection of the common iliac artery
- Non-traumatic presentation with moderate symptoms
- Managed conservatively with medical therapy and clinical improvement
- Importance of imaging and close follow-up in vascular anomalies

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