Isolated common iliac artery dissection and aneurysm

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DESCRIPTION

A 49-year-old man, with a history of well-controlled hypertension, presented with sudden left lower quadrant abdominal pain after defaecation. The severity of the pain was scaled as 1–2 over 10 and the pain was continuous. There were no digestive symptoms. On admission, vital signs were as follows: blood pressure 130/70 mm Hg, pulse rate 70 bpm, respiratory rate 18 breaths/min, SpO2 97% and body temperature 37.4°C. On physical examination, the abdomen was soft and flat and the bowel sound was normal. There was tenderness on the left side of the umbilicus. Neither rebound nor guarding was noted. Pulses in the peripheral arteries were well palpable and equal. There were no specific signs suggestive of any connective tissue diseases such as Marfan syndrome. Laboratory data were within normal limits. Contrast-enhanced CT revealed a dissection and aneurysm formation in the left common iliac artery (figure 1). The patient was diagnosed as having isolated left common iliac artery dissection.

Isolated common iliac artery dissection is a very rare disease; we are aware of only a few case reports. In those articles, the possible causes included atherosclerosis, fibromuscular dysplasia, connective tissue disease, trauma and pregnancy.1 2

In the present case, the only risk factor was hypertension and it has, to date, been well-controlled with medication. Exhaustive hormonal studies for secondary hypertension were negative. At present, the patient is being treated conservatively with antihypertensive medications. However, serial imaging tests should be obtained in order to observe the possibility of further enlargement or rupture.3 Surgical or endovascular treatment may be necessary in the future.

Figure 1 Blue arrow showing isolated iliac artery dissection and aneurysm, with a diameter of 17 mm. The thrombosed false lumen of the left common artery root tended to be retracted. There was no other dissection and no aneurysm.
Learning points

▸ One differential diagnosis of abdominal pain in the emergency department can be iliac artery dissection, especially when there is left-sided, acute, continuous pain. Check for an ischaemic organ as a possible diagnosis.
▸ Follow-up imaging is important to decide the timing of operation and the size.
▸ Evaluation of the risk factors for isolated iliac artery dissection includes not only atherosclerosis, and also connective tissue disease including Ehlers-Danlos syndrome, Marfan syndrome, fibromuscular dysplasia, trauma and pregnancy.

Contributors HI cared for the patient and NT observed the management and followed up the patient from a cardiovascular surgeon’s view of point.

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REFERENCES