

Buttock claudication: what induces pain only in the left buttock on every movement?

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DESCRIPTION

An 89-year-old man presented with a 3-day history of pain in the left buttock with every movement. He felt pain whenever he moved, including when standing up or walking. Although this prevented him from walking, the pain disappeared at rest. He had a history of arteriosclerotic diseases including arteriosclerosis obliterans and cerebral infarction, but he had no history of trauma. He had undergone pacemaker implantation to treat a complete atrioventricular block. Physical examination revealed no tenderness or skin lesions in the left buttock and no signs of nerve root compression. Laboratory examination revealed an elevated D-dimer concentration of 1.24 µg/mL. A plain pelvic radiograph showed no findings of osteoarthritis or bone fractures. Therefore, we performed CT with contrast enhancement to identify vascular abnormalities, especially around his left buttock.

CT revealed occlusion of the left superior gluteal artery with severe systemic arteriosclerotic changes (figure 1A–C). Therefore, the patient was diagnosed with left buttock claudication due to occlusion of the left superior gluteal artery. Site of occlusion was marginally preserved, though the superior gluteal artery is a terminal branch of internal iliac artery, we treated him conservatively. We chose an oral anticoagulant because paroxysmal atrial fibrillation had been revealed on his pacemaker record.

Buttock claudication is caused by occlusion of the internal iliac artery or its branches, preventing

Learning points

- ▶ Buttock claudication is caused by occlusion of the internal iliac artery or its branches.
- ▶ Buttock claudication can be a diagnostic challenge because of the lack of ischaemic symptoms in the legs or a low Ankle–Brachial Index.
- ▶ Buttock claudication must be considered when seeing a patient with exertional pain in the buttock.

gluteal blood flow.¹ Although the most common cause is vascular surgery involving the internal iliac artery, arteriosclerosis or thrombosis can also cause buttock claudication.¹ Angiography and CT with contrast enhancement are useful for a definitive diagnosis. However, buttock claudication can be a diagnostic challenge, and it may be misdiagnosed as an orthopaedic disease because of the lack of ischaemic symptoms in the legs or a low Ankle–Brachial Index.²

An understanding of the vascular anatomy is imperative to achieving a correct diagnosis of buttock claudication. Recognition of ischaemic lesions of gluteal muscle claudication as the cause of buttock claudication could enable a rapid and correct diagnosis. Furthermore, buttock claudication must be considered when seeing a patient with exertional pain in the buttock.

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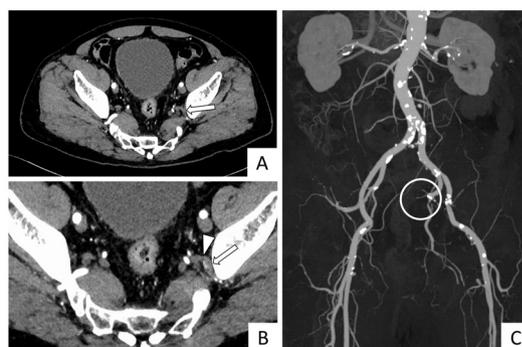


Figure 1 Abdominal CT with contrast enhancement. (A) Axial view, (B) enlarged axial view and (C) three-dimensional image of the arteries. The site of occlusion was the left superior gluteal artery (A and B, arrows; C, circle). The low-density area in the enlarged axial view was suspected to be a thrombus (B, arrowhead).



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