

Cystic Adventitial Disease of the Popliteal Artery (Literature Review and Case Report)

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Abstract

Cystic adventitial disease is a rare cause of unilateral intermittent claudication of unknown aetiology, which is characterized by the formation of multiple mucin-filled cysts in the adventitial layer of the arterial wall resulting in obstruction to blood flow. The disease predominantly presents in young otherwise healthy males and most commonly affects the popliteal artery (85 % of cases). Cystic adventitial degeneration can be diagnosed by duplex ultrasound, magnetic resonance imaging, magnetic resonance angiography, or computed tomographic angiography. Surgery is the primary mode of treatment, including replacement of the affected vascular segment by venous or synthetic interposition graft. Alternatively, the cysts can be drained by percutaneous ultrasound-guided needle aspiration. We conducted a literature review of the aetiology, diagnosis and treatment of this uncommon condition and present the case report.

Key words: Cystic Adventitial Disease, Cystic Adventitial Degeneration, Popliteal Artery, Duplex Ultrasound, Magnetic Resonance Angiography, Intermittent Claudication.

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