

IMAGE

Concave Margin Sign on Doppler Ultrasound

A 60 year old woman presented with two days of rest pain in her left leg and a six day fever. Doppler ultrasound (DUS) revealed complete left popliteal artery obstruction with no colour flow and delineating concave margins (A). A computed tomography (CT) scan confirmed the arterial occlusion and showed that it had extended to the tibioperoneal trunk and proximal tibial arteries (B). Repeated blood cultures were negative, but transoesophageal echocardiography revealed vegetations on the mitral and aortic valves, confirming infective endocarditis. A left popliteal thromboembolectomy was performed. Culture of the thrombus was positive for *Streptococcus lugdunensis*. The patient recovered with appropriate antibiotic therapy. At follow up no lower limb pain was reported, and distal pulses were palpable. On fluoroscopy and CT, the concave margin sign is typical of embolic occlusion. This very useful sign should also be sought during DUS, as it can indicate early the embolic nature of an acute arterial occlusion.

Rémy Hamdan*

Department of Vascular Medicine, Macon Hospital Centre,
Mâcon, France

Mélanie Leboffe

Department of Vascular Surgery, Macon Hospital Centre,
Mâcon, France

*Corresponding author. Explorations fonctionnelles de
Médecine Vasculaire, Centre Hospitalier de Mâcon - 350,
Boulevard Louis Escande, 71000 Mâcon, France.
Email-address: remy.hamdan@gmail.com (Rémy
Hamdan)

© 2024 The Authors. Published by Elsevier Ltd on behalf of
European Society for Vascular Surgery. This is an open
access article under the CC BY-NC-ND license ([http://
creativecommons.org/licenses/by-nc-nd/4.0/](http://creativecommons.org/licenses/by-nc-nd/4.0/)).

<https://doi.org/10.1016/j.ejvsf.2024.01.002>

