

Bedside ultrasound detected long saphenous vein thrombosis requiring ligation

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Received: 11 November 2010 / Accepted: 26 January 2011 / Published online: 19 February 2011
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A 64-year-old gentleman presented to the Emergency Department with a 2-week history of a painful right leg. Examination was consistent with thrombophlebitis of the long saphenous vein extending from the medial malleolus to the groin. A bedside ultrasound was performed using a Sonosite M-Turbo and a linear probe which confirmed the diagnosis. Importantly, thrombus was seen to extend to the sapheno-femoral junction but had not yet propagated into the femoral vein. Figure 1 clearly shows echogenic clot within the Long Saphenous vein, compression of the veins (Fig. 2) shows that the long saphenous does not collapse unlike the femoral vein. Colour flow Doppler (Fig. 3) further confirms the diagnosis with flow in the femoral but not the long saphenous. He was admitted under the vascular surgeons for urgent ligation of the long saphenous vein.

Although superficial thrombophlebitis is generally regarded as a benign condition without risk of pulmonary embolization, this is not always the case. If the long saphenous vein is affected and thrombus approaches the sapheno-femoral junction or indeed extends into the deep system, then the risk of PE is significantly increased. The rate of progression of the thrombotic process from the long saphenous vein into the deep venous system has been reported as 8.6%, of which 10% embolise to the lungs [1]. It is important therefore for Emergency Physicians to



Fig. 1 B mode image at the groin showing echogenic thrombus in the long saphenous vein



Fig. 2 B mode image at the groin showing a non-compressible long saphenous vein

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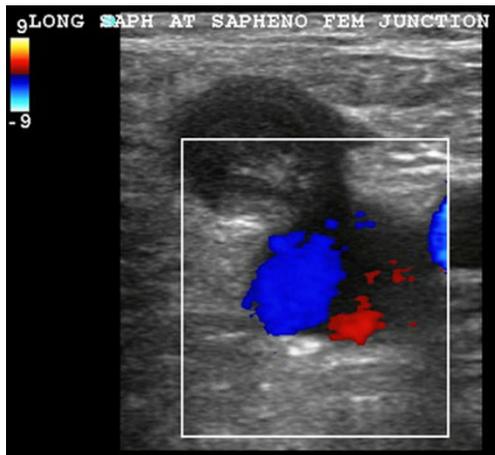


Fig. 3 Colour Doppler image showing the absence of flow in the long saphenous vein

assess the proximal extent of the thrombus when managing such patients; this can easily be done at the bedside using portable ultrasound. There remains some debate in the

medical literature, however, on the optimal treatment for saphenofemoral junction thrombus, with some preferring operative management [2], and others advocating anticoagulation [3]. If the thrombus has not entered the femoral vein then the condition may be treated with a high tie of the long saphenous thus preventing embolization and sparing the patient the need for prolonged anticoagulation.

Conflict of interest None to declare.

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