SHORT REPORT

Spontaneous Lymphocele in the Lower Limb

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Case Report

A previously fit 76-year-old man on warfarin for atrial fibrillation, presented with a 6-month history of a painful cystic swelling located on the medial aspect of his right mid-calf. There was no history of trauma. On examination there was a firm, superficial non-pulsatile swelling, measuring 5 cm × 5 cm. The overlying skin appeared normal and there was no regional lymphadenectomy. Aspiration revealed a straw-coloured fluid, which subsequently reaccumulated.

An MRI scan demonstrated a well-circumscribed cystic lesion in the mid-calf, which abutted but did not extend deep to the underlying fascia (Figs 1 and 2). This was excised under general anaesthesia and pathological examination revealed a cyst with a fibrous wall containing patchy inflammatory infiltrate. By the fourth postoperative day, a sinus, discharging profuse amounts of fluid, had developed at the distal end of the incision (Fig. 3). This was surgically excised and the sinus tract was cauterized by electrocoagulation. He made an uneventful recovery and was discharged home on the 7th postoperative day.

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Fig. 1. MRI scan demonstrating cystic lesion superficial to fascia-transverse view.

Fig. 2. MRI scan demonstrating cystic lesion superficial to fascia-sagittal view.
the wound. A sinogram using methylene blue was performed and the sinus was excised, leaving an open cavity. As the wound continued to discharge, a lymphoscintogram was performed confirming the diagnosis of a lymphocele (Fig. 3). The wound was managed conservatively with four layer pressure bandaging and within three months the wound was dry and the defect had healed, leaving a satisfactory scar.

Discussion

A lymphocele is a collection of lymphatic fluid contained within a sac, which commonly arises secondary to injury to lymphatic channels. Abdominal lymphoceles are seen within the fields of gynaecology, renal transplant and vascular surgery. Lymphoceles have also been described in the lower limb following saphenous vein harvesting for coronary artery bypass grafting, tourniquet application in arthroscopy, blunt trauma to the leg, and as a complication of cosmetic thighplasty.

We report a spontaneous lymphocele in this case, which has not been previously described. Lymph contains relatively few clotting factors, suggesting that the anticoagulant effects of warfarin may have contributed to the prolonged period taken for the lymphatic channel to seal.

Diagnosis can prove difficult, but aspiration with analysis of the protein content of the fluid (not performed in this case as the diagnosis was not initially considered), which is as low as 0.5 g/dl in the extremities, is most commonly described in easily accessible lymphoceles. Although imaging techniques such as CT or MRI may help anatomical location, they will not provide a definitive diagnosis. As in this case, immunolymphoscintigraphy may be a useful diagnostic adjunct.

Treatment varies as to the location of the lymphocele and much of the literature available is related to those within the abdominal cavity, where techniques include image-guided aspiration, the percutaneous introduction of sclerosants (such as tetracycline) and doxycycline) and marsupialisation.

Lymphoceles situated on the lower limb offer the option of aspiration or excision, although some advocate the need to identify and ligate the connecting lymph vessels. We found pressure bandaging successful in the management of discharging lymphatics where no vessel can be identified for ligation.

References