THE ROLE OF MAGNETIC RESONANCE IMAGING IN DIAGNOSIS OF PERIPHERAL LYMPHATIC DISORDERS

N-F. Liu, C-G. Wang

Departments of Plastic Surgery (NFL) and Radiology (CGW), Chang Zheng Hospital, Second Military Medical University, Shanghai, China

ABSTRACT

Magnetic resonance imaging (MRI) was used in 13 patients with peripheral lymphedema and 2 patients with extensive cavernous lymphangioma of the limb for the purpose of evaluating its role in diagnosis of lymphatic disorders. In chronic lymphedema, MRI showed deformity of lymphatics at different tissue levels. In the subcutis, MRI characteristically displayed diffuse edema or a honeycombed pattern consistent with reticular lymphangiectasis and “lakes” with a marked increase in signal intensity with T2-weighted imaging. In lymphedema hyperplasia and chylous reflux, MRI depicted dilated retroperitoneal lymphatic collectors and lumbar trunks. In cavernous lymphangiomatosis, MRI demonstrated a prominent lattice-like pattern which had lower signal intensity on T1-weighted imaging and higher intensity on T2-weighted imaging. The findings of MRI are valuable not only for accurate assessment of lymphatic dysplasia syndromes but also provide a blueprint for treatment options.