Silicone lymphadenopathy, caused by a foreign body giant cell reaction to silicone particles, is a rare but recognized complication of silastic joint replacement. We describe the first case of epitrochlear lymphadenopathy in association with metacarpophalangeal (MCP) joint replacements and the benefit of ultrasonography (US) and magnetic resonance imaging (MRI) in making the diagnosis.

A 75-year-old woman with a 32 year history of seropositive erosive rheumatoid arthritis (RA) had had MCP joint replacement surgery performed to the left hand in 1976. She presented in 1999 with a swelling on the medial aspect of the left antecubital fossa. There were no systemic features. Laboratory investigations revealed C-reactive protein 6 mg/l and erythrocyte sedimentation rate 11 mm/h. A radiograph of the left hand confirmed fractured MCP joint replacements. US of the left antecubital fossa showed a soft tissue swelling between the brachial artery and basilic vein (Figures 1, 2). MRI of left antecubital fossa detected a soft tissue swelling with no connection to nerve or nerve sheath (Figures 3, 4). Excision biopsy revealed a reactive lymph node containing a foreign body giant cell reaction to refractile but not birefringent material, consistent with silicone (Figure 5).

Reports of silicone lymphadenopathy in association with hand prostheses described the axillary lymph nodes. This is the first report of epitrochlear lymph node involvement due to silicone lymphadenopathy. The epitrochlear lymph nodes are situated just proximal to the medial epicondyle of the humerus and are rarely palpable in health. Additional causes of epitrochlear lymph node enlargement include infections (cytomegalovirus, rubella, glandular fever, human immunodeficiency virus, cat-scratch disease, toxoplasmosis, syphilis, tuberculosis, leishmaniasis, and lepromatous leprosy), sarcoidosis, active synovitis of the hands.
and wrists in RA reported in 29% of patients in one series, malignant lesions of the hand or forearm such as melanoma, carcinoma or sarcoma, and lymphoproliferative disease. The coincidence of malignant lymphoma and silicone lymphadenopathy has been reported with RA and previous joint replacement surgery. This case emphasizes the need for accurate diagnosis of the cause of lymphadenopathy in any patient with RA who has had a joint replacement.

REFERENCES
Figure 4. T2 weighted MR image of the lesion (arrow).

Figure 5. Microscopy shows a reactive lymph node containing a foreign body giant cell reaction to refractive but not birefringent material. Arrow indicates a silicone particle (H&E, ×400).