Clinical Vignette

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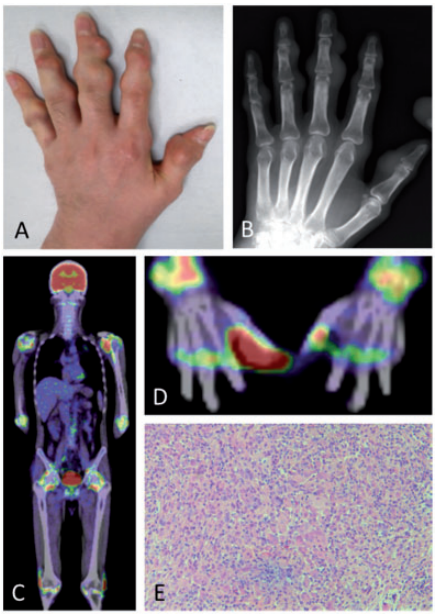
Multicentric reticulohistiocytosis misdiagnosed as tenosynovial giant cell tumour

A 39-year-old man was referred to our institution in September 2012 with multiple nodular lesions of the hands (Fig. 1A), elbows, knees and ankles. The hand tumours had been operated on twice by an orthopaedic surgeon at the pre-referral hospital in 2009 and 2010. The pathological diagnoses were both tenosynovial giant cell tumour (TS-GCT). However, the new occurrence of multiple lesions in addition to the pulmonary lesions, which caused him dyspnoea, prompted the physicians to refer him to our hospital. We conducted a roentgenologic examination (Fig. 1B), MRI and 2-deoxy-2-[fluorine-18]fluoro-D-glucose (^{18}F-FDG) PET/CT scan (Fig 1C and D). A specialized pathologist in our institution diagnosed the specimen as multicentric reticulohistiocytosis (MRH) (Fig. 1E). Major joints including the wrists already exhibited erosive arthritic change (Fig. 1B).

MRH is a very rare systemic non-Langerhans histiocytosis characterized by erosive arthritis, skin lesions and occasionally lesions of internal organs. The presence of periarticular or articular lesions can lead to this disease being misdiagnosed as RA. However, extra-articular or soft tissue lesions will be diagnosed incorrectly, such as TS-GCT, particularly by non-specialized surgeons in general hospitals, because of a lack of precise knowledge of not only MRH, but also TS-GCT. Considering that a number of patients with MRH suffer progression of the erosive arthritis to an arthritis mutilans–like state, early and precise diagnosis and early initiation of adequate treatment are crucial for such patients.

Fig. 1 Findings of multicentric reticulohistiocytosis in a 39-year-old man



(**A**) Macroscopic appearance revealed multiple nodular lesions of the fingers that differed from RA. (**B**) A plain radiograph showed a periarticular soft tissue mass and degenerative arthritis. (**C** and **D**) High uptake of ^{18}F-FDG in multiple lesions on a PET/CT scan. (**E**) Infiltration of multinucleated giant cells and histiocytes resembled TS-GCT histologically.

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