

A case of Friedrich's disease of the clavicle

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Friedrich's disease is an aseptic osteonecrosis of the medial end of the clavicle. It is a rare condition that can be confused with osteomyelitis, arthritis, or tumor. Because it often resolves spontaneously, a correct diagnosis will save the patient from unnecessary treatment.

Spontaneous necrosis of the medial end of the clavicle was first described by Friedrich (1924). Since then, only 15 cases have been reported. Clinically and radiographically, the condition can resemble osteomyelitis, arthritis, or a tumor.

Case report. A 54-year-old man was admitted with painless swelling and some crepitation of his right sternoclavicular joint for 9 months. There was no history of trauma, infection, steroid treatment, or other joint symptoms.

There was some fluctuation over the swelling, but without tenderness or increased skin temperature. There was nothing palpable behind the clavicle, and no sign of adenitis was present. The joint was slightly unstable.

Radiographic examination, including tomography, revealed an irregular defect measuring 4.5 cm in length and 1.0 cm in width in the anteromedial end of the right clavicle (Figure 1), and the joint contour was not clearly defined. Blood tests showed normal values for hemoglobin, ESR, and WBC. The AST was 160 IU per ml (doubtfully elevated) and the ASH, 1,000 IU per ml (normal). The Rose-Waaler titer was not elevated. The anti-DNA reaction was negative.

Thus, neither the radiographs nor the blood tests indicated that the patient had a systemic

rheumatic illness, tumor, or chronic infection. The condition was still unchanged both clinically and radiographically 2.5 years later.

Discussion

The etiology of Friedrich's disease is unknown. The condition is rare and has not been previously described in Scandinavia. Biopsy by Friedrich (1924), Fischel and Bernstein (1975), Heinemeier et al. (1979), and Levy et al. (1981) has shown the histologic picture of aseptic necrosis. The only



Figure 1. The right sternoclavicular joint (arrow) with an irregular joint contour and subchondral rarefactions.

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symptom is often an unexplained swelling of the sternoclavicular joint, as in our case. We did not carry out a biopsy because the clinical and radiographic findings were diagnostic. The condition, stationary over a long period, often disappears

spontaneously, so that active treatment is unnecessary. Heinemeier and Torklus (1979), however, suggested resection of the medial clavicular end in case of marked loss of movement of the shoulder.

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