Case report

Dislocation of the manubriosternal joint in rheumatoid arthritis

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SUMMARY Rheumatoid arthritis (RA) is a disease characterised by joint deformity and subluxation. Although many joints may be involved, dislocation of the manubriosternal joint is extremely rare. A case of dislocation of this in a woman with RA is presented.

Case report

The patient, a 62-year-old woman, first presented to this hospital in September 1979 with an acute exacerbation of chronic obstructive airways disease. She gave a history of pernicious anaemia treated with monthly injections of vitamin B₁₂ and of longstanding rheumatoid arthritis (RA) treated with

paracetamol and dextropropoxyphene (Distalgesc) only.

Examination revealed a thin, frail woman. There was a marked kyphoscoliosis, and deformity of the manubriosternal joint (MSJ) with a protrusion superiorly and recession inferiorly. Signs of mitral regurgitation and scattered crepitations and rhonchi were audible on auscultation of the chest. There was widespread evidence of RA, with deformity affecting hands, wrists, elbows, shoulders, and knees (Fig. 1). A postero-anterior chest radiograph showed patchy

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Fig. 1 Radiograph of hands showing marked destruction and deformity of both hands and wrists.

Fig. 2 Lateral radiograph of sternum showing posterior displacement of the manubrium on the sternum.

consolidation in both lower zones, and a lateral view revealed posterior dislocation of the manubrium on the sternum (Fig. 2).

Discussion

RA is a common condition affecting about 3% of the population and shows a female preponderance.¹ It may affect any of the 187 synovial joints in the body, but nonsynovial joints may be affected by any nearby synovitis, possibly by interfering with local blood flow.² Deformity and subluxation may occur

in almost any affected joint and are recognised commonly in finger and toe joints and the cervical spine. Posterior dislocation of the medial ends of the clavicles, and even of the xiphoid, on the sternum have been described.

The MSJ is a secondary cartilaginous joint: one-third of these joints, however, may resemble synovial joints.³ Although there are reports of pain and tenderness affecting this area,⁴ and radiographic studies have shown that between 40% and 70% of patients with RA have significant MSJ changes,^{4,5} I am aware of only one previous report of actual dislocation of this joint.⁶ In that case the deformity was symptomatic and the cause of presentation, whereas in this case it was an incidental finding.

It is important to be aware that symptoms in this area may be due to MSJ involvement and that dislocation may be detected by what appears to be a characteristic deformity.

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References

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