Correspondence

Arthritis of the middle ear in ankylosing spondylitis

SIR, We have read with interest the paper by Magaro, Ceresia, and Frustaci on arthritis of the middle ear in ankylosing spondylitis.

The joints between the incus and the malleus, and between the incus and the stapes are of the diarthrodial type. The footplate of the stapes articulates with the walls of the oval window in a syndesmotic joint; this articulation is held together by the annular ligament. For all practical purposes the ossicular chain acts as a rigid piston which is suspended from the walls of the middle ear by tendons and ligaments. It transmits the excursions of the tympanic membrane in a columnar fashion, and only a gross defect in the tympanic membrane, fixation of the ossicular chain to the walls of the middle ear, or loss of movement of the joint between the footplate of the stapes and the oval window will result in significant conductive deafness. In fact in tympanoplasty surgery all or part of the ossicular chain is substituted by different types of autologous or artificial implants, and the auditory result is good provided that satisfactory continuity is established between the tympanic membrane and the oval window.

The exploratory and audiometric findings in the subject of Magaro, Ceresia, and Frustaci's report are consistent with ankylosis of the stapediautricular joint. Usually this condition is diagnosed as otosclerosis until proved otherwise by exploratory tympanotomy. The radiological changes in tomography of the middle ear are seldom conclusive.

Otosclerosis is a familial disease of the bone of the otic capsule, which often produces anomalous bone formation and becomes symptomatic when it encroaches upon the stapediautricular joint, decreasing its mobility. This new bone has a characteristic histological appearance which clearly differs from the inflammatory enthesitic changes observed in ankylosing spondylitis. Otosclerosis is the commonest single cause of deafness in active adult life, and its incidence in the general population of the western hemisphere is approximately one in 200.

Since the hearing loss of the reported patient is surgically treatable, it would have been interesting to know the macroscopic and pathological findings of his middle ear, before suggesting ankylosis as the cause.

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Diabetic cheiroarthropathy in adult non-insulin-dependent diabetes

SIR, We read with interest the paper of Dr Fitzcharles and coworkers who reported a high prevalence of limited joint mobility in adult patients with non-insulin-dependent diabetes (NIDD). We also observed the same abnormality but its prevalence was very low. In 1983 we examined 102 patients with NIDD and only four showed limited joint mobility or sclerodactyly, or both. From January to July 1984 we found the same features in three out of 63 NIDD patients. All our diabetic patients with limited joint mobility or sclerodactyly, or both were affected by diabetic microangiopathy (retinopathy or nephropathy, or both), had good glycaemic control, and none of them was receiving insulin.

As Dr Fitzcharles and coworkers pointed out, this condition is fairly common in juvenile insulin-dependent diabetes, but it 'has been described only infrequently in adults' with either insulin- or non-insulin-dependent diabetes.

Since the patients were assessed by the same method, the discrepancy between our observations may reflect genetic differences between different populations. It would be interesting to study the HLA system in these patients to determine whether different subsets exist, as well as to know the prevalence of systemic sclerosis in the population studied by Dr Fitzcharles and coworkers. It is apparent that the occurrence of joint contractures and sclerodactyly is similar in diabetes and systemic sclerosis, and microangiopathy is very important in the pathogenesis of both disorders; therefore further studies are necessary in order to clarify this point.

References