Correspondence

Lateral subluxation of atlanto-axial joint

Sir,

In their useful article on lateral subluxation of the atlanto-axial joint in rheumatoid arthritis Burry *et al.* (1978) note that it is difficult to explain, in simple neuroanatomical terms, the occurrence of orbital pain in patients with rheumatoid arthritis of the upper cervical spine (as well as in persons with degenerative joint disease of the same area).

I wish to suggest that not only the orbital pain, but also the pain felt in the occiput and behind the ear, can be explained by mechanisms other than direct irritation of nerve roots. Disease of joints is almost invariably accompanied by pain syndromes of associated muscles, with trigger points and referred pain. Muscles in the vicinity of the upper cervical spine, which refer pain to the orbit, include the occipitalis, splenius capitis and cervicis, and sternocleidomastoid. The semispinalis cervicis and splenius capitis refer pain to the occiput, and the sternocleidomastoid to the postauricular area. (Cyriax, 1938; Kelly, 1942; Travell, 1967; also Simons and Travell, unpublished observations). Many who have studied pain referred from muscle believe that it is a reflex phenomenon in which the central and possibly the autonomic nervous systems are involved (Kelly, 1945; Travell, 1949).

Treatment of this pain by injection of trigger points with local anaesthetic (as was done in case 1 of Burry *et al.*) often is helpful. I have observed it to relieve 'intractable' nuchal and head pain when a full array of measures directed at the spine itself had failed. Such an approach merits consideration in all patients with this problem.

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Change in style of references

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¹Green A B, Brown C D, Grey E F. A new method of measuring the blood glucose. *Ann Rheum Dis* 1980; 64: 27-32.

²Green A B, Brown C D. *Textbook of Medicine*. London: Silver Books, 1980.

³Grey E F. Diseases of the pancreas. In: Green A B, Brown C D, eds. *Textbook of Medicine*. London: Silver Books, 1980; 349-362.

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