Medical Memoranda

Spondylitis Ankylopoietica in a Uganda African

Spondylitis ankylopoietica (Marie-Strümpell-Bechterew disease) appears to be very rare among the Bantu Africans. A search of the English literature failed to reveal a single reported case in an indigenous African, and there is no record of one in the clinical records of Mulago Hospital during the past eight years—other than that described below. M. Weinbren (1959, personal communication) reports a similar very low incidence in the African population of Johannesburg. Cockshott (1959, personal communication) has, however, occasionally seen it in West Africans at Ibadan. The incidence in American negroes also appears to be low, for Baker *et al.* (1950) had only three cases in a consecutive series of 100 patients with this condition admitted to Duke Hospital in North Carolina. He does not state if these were of pure negro strain.

CASE REPORT

In January, 1959, a male Muganda of about 30 fell off a bicycle he was riding, and five weeks later attended hospital complaining of marked stiffness of the neck after the accident. Though x-ray examination of his cervical spine showed no fracture, considerable ossification of his anterior and posterior longitudinal ligaments was noted (Fig. 1). He was subsequently admitted to hospital for investigation.

On further questioning he admitted to some stiffness of the neck for the last 14 years, but stated that it had been much worse since the accident. Apart from some similar stiffness in the rest of his back he had no other complaints. He denied any history of urethral discharge, tonsillitis, dysentery, fevers, or venereal disease. His father was dead, but the patient stated that his father had suffered from a "bad back" and that one of his brothers was similarly affected. His mother, two other brothers, a sister, and his wife and a newly born child were all stated to be well, but it has not been possible to get any of them to hospital for examination. He works as a peasant cultivator, and has lived all his life within 30 miles (48 km.) of Kampala.

Physical examination showed a well-nourished muscular man standing in a posture of fixed flexion of the entire spine. The joints of all four limbs and the temporo-mandibular and atlanto-occipital joints showed a full range of painless movement, but the spine was rigidly immobile in a uniform flexed curve and the costo-vertebral joints were also fixed. There was no mottling of the teeth. The heart, lungs, and abdomen showed no abnormality except that respiratory movement was entirely abdominal owing to fixation

FIG. 1.—Cervical spine showing ossification in anterior and posterior longitudinal ligaments, normal disks, and fusion of the zygo-apophyseal joints.

of the ribs. There was no urethral discharge. The blood-pressure was 130/80. No sugar or albumin was present in the urine.

The Kahn test was negative and agglutination reactions for typhoid and brucellosis were also negative. Serum alkaline phosphatase was 6 units/100 ml. The E.S.R. was 7 mm./hour (Wintrobe).

Radiological examination showed partial ossification of the anterior and posterior longitudinal ligaments and both lateral ligaments throughout the spine, with bony bridging between most of the vertebral bodies. The zygo-apophyseal joints were completely fused from the second cervical to the first sacral on both sides. The dorsal and lumbar vertebral bodies showed "squaring" of their contours in lateral projection with slight osteoporosis in the lumbar region. The vertebral borders and surfaces were not eroded and the intervertebral disks were normal. There was some ossification of

the interspinous ligaments in the lumbar region, and the costo-transverse joints were fused. The sacro-iliac joints showed irregular erosions with surrounding sclerosis, and the joint spaces were widened (Fig. 2). The bones of the wrists, hands, ankles, and feet were normal. Unfortunately the patient refused further examination.

COMMENT

The apparent rarity of spondylitis ankylopoietica among Africans requires careful consideration of other possible diagnoses in this case. Reiter's syndrome (which is not uncommon in Uganda) and rheumatoid arthritis were rejected as possible alternatives owing to the distribution and nature of the x-ray changes demonstrated and the absence of any clinical suggestion of these diseases.

The common spondylitis of Africans is inflammatory, and, though ossification of ligaments occurs with it, its common characteristics are destruction of vertebral bodies and intervening disks, neither of which were found in the present case.

Our thanks are due to the Director of Medical Services, Uganda, for permission to publish this case.

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REFERENCE

Baker, L. D., Coonrad, R. W., Reeves, R. J., and Hoyt, W. A., jun. (1950). *J. Bone Jt Surg.*, 32A, 848.

Reprints of an article by the Joint Tuberculosis Council printed in *Tubercle*, October, 1960, "Tuberculosis: Report on the Reception of Ex-patients in Respect of Re-employment and Superannuation, Life Assurance and Emigration," are now available (price 1s.) from Dr. R. L. Midgley, Hawkmoor Chest Hospital, Bovey Tracey, Devon.