TENDER HEEL DUE TO PAGET'S DISEASE

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The following reports are of two patients who attended the out-patient department complaining of pain in the heel and were found to have Paget's disease of the calcaneum. This is of some interest because of the apparent rarity of the condition. The diagnosis was difficult because the primary complaint in both cases was of pain in the heel. In one there were no symptoms suggesting Paget's disease and in the other only on further questioning were suggestive symptoms elicited. In the first case there was no radiographic evidence of involvement of other bones; in the second the skull, spine and pelvis showed typical appearances of Paget's disease.

CASE REPORTS

Case 1—A woman aged seventy-seven years complained of pain in the left heel of one year's duration. The pain was like "pin-pricks"; it was present especially after walking but was felt also at night in bed. There had been no previous symptoms in the heel.

On examination, there were none of the usual signs of Paget's disease, and no visible abnormality was observed in the left heel. But tenderness was elicited by pressure on the plantar aspect of the calcaneum and on lateral compression.

Investigations—The Wassermann and Kahn reactions were negative. Serum alkaline phosphatase was 12 King-Armstrong units per 100 millilitres. Serum inorganic phosphate was 3 milligrams per 100 millilitres, and serum calcium 10.2 milligrams per 100 millilitres.

Radiographic examination showed no evidence of Paget's disease in the skull, spine, pelvis or upper femora. The left calcaneum showed a trabecular pattern of a coarse and dense type, especially in the main system of striae (Fig. 1).

Progress—A sorbo rubber pad inside the shoe was recommended. The pain gradually diminished during the following six months and no further treatment was requested.

Case 2—A man aged sixty-seven years complained of pain in the right heel of three months' duration. The pain was sharp in nature, "like walking on a broken bone." It became worse on walking and occurred at night while in bed. There was no history of injury or of previous symptoms in the heel. On further questioning, he stated that he had had fleeting pains in the back for about eight years and more recently he had noticed pains in the head, but these had not necessitated medical advice. Prostatectomy had been performed nine years before for benign hypertrophy but there had been no subsequent urinary trouble.

On examination, there were no signs of Paget's disease. There was no visible abnormality of the right heel but the right calcaneum was tender on pressure as compared with the left. Tenderness
was elicited by pressure on the plantar aspect and on lateral compression well away from the plantar surface. The tenderness on lateral compression suggested that spur formation was not the primary cause of the tenderness (Fig. 2). On rectal examination a normal post-prostatectomy bed was palpated.

Investigations.—The Wassermann and Kahn reactions were negative. The total serum acid phosphatase was 2 King-Armstrong units; prostatic phosphatase 1 unit; and serum alkaline phosphatase 30 units. Serum calcium was 11 milligrams per 100 millilitres and serum inorganic phosphorus 3 milligrams per 100 millilitres.

Radiographic examination showed well marked signs of Paget’s disease in the skull, in the fourth and fifth lumbar vertebrae and in the pelvis. The right calcaneum showed a trabecular pattern of a coarse and dense type, especially in the main system of striae. A small calcaneal spur was present (Fig. 2).

Progress.—A sorbo rubber pad inside the shoe was recommended. The pain diminished over the following six months, and no further treatment was necessary.

DISCUSSION

Paget’s disease of the calcaneum is not so rare as is generally considered. It is usually diagnosed in association with Paget’s disease of other bones on routine examination, and is of secondary interest. It may or may not cause symptoms of tender heel. However, in these two patients the primary complaint was of pain in the heel, and Paget’s disease of the calcaneum was discovered only after radiographic examination. The value of radiographing both heels for comparison is evident. Further radiographs of other parts of the skeleton may be necessary for confirmation.

Fairbank (1950) stated that in Paget’s disease the radiographs may show an alteration in striation in any bone, particularly in the pelvis, sacrum, vertebral bodies and calcaneum. He quoted Holland (1925) as saying that the appearance of striation in the calcaneum is to be regarded as an early sign of diagnostic value. Holland (1925) stated that if there is a suspicion of Paget’s disease, a complete skeletal survey might clear up the diagnosis and for this purpose the bones of the skull and the calcaneum are especially important.

Brailsford (1951) has seen three or four cases of Paget’s disease of the calcaneum without demonstrable lesions in other bones and about twenty in which Paget’s disease was present elsewhere. He adds that in some patients fracture of the calcaneum has occurred from violence which might not have fractured a normal bone.

Lasserre and Clave (1940) reported a case in which the primary complaint was pain in the heel. Radiologically they suspected the condition to be due to Paget’s disease of the calcaneum and confirmed the diagnosis by radiographic examination of the skull.

SUMMARY

1. Two cases of Paget’s disease of the calcaneum are reported; in both, the primary complaint was of pain in the heel.
2. In the first case there were no demonstrable lesions elsewhere, but in the second the typical radiographic appearances of Paget’s disease were shown in other bones.
3. The literature on the subject is briefly reviewed.

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REFERENCES