Case Reports

‘Floor Layers Foot’ — An Occupational Bursa

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SUMMARY: A case of an occupational bursa of the forefoot resulting from prolonged pressure as a floor-layer is described. It is compared with bursae occurring in similar occupations.

A 24 year old man presented with a large cystic swelling on the dorsolateral aspect of his right foot that had been present for some seven months (Fig. 1). This was considered to be an adventitious bursa which had arisen as a result of his occupation as a floor-layer.

At operation on 3 February 1977 the forefoot was explored through a transverse incision over the swelling and a thick walled bursa was found between the superficial and deep fibres of the extensor retinaculum. The bursa contained clear blood-stained serous fluid and was excised. Macroscopically the specimen measured 6 x 5 x 4 cm and its wall was 0.7 cm thick. Histological examination of the specimen showed it to be a cyst with a fibro-collagenous wall and a smooth non-synovial lining. Reactive vascularisation was also seen around the wall and the histological picture is consistent with a traumatic bursitis.

Discussion

Bursae are of two distinct types. There are those present in the normal anatomy and adventitious bursae such as the case described which develop in response to repeated friction or prolonged pressure.

Two bursae of the foot are commonly described. These are the anatomical retro-calcaneum bursa and the adventitious retro-achilles bursa. The latter has been described associated with ill-fitting footwear and also in miners due to their kneeling position1. Many reports have been made about occupational bursae in miners particularly those involving the knees1-8. Hunt (1974) also describes an adventitious bursa in miners over the tarsal bones which is very similar to the present case but somewhat more laterally placed9.

Fig. 1 The Bursa

Fig. 2 The normal working posture
Floor-layers knees and ankles are subjected to very similar stresses as kneeling miners so it is reasonable to expect similar lower limb bursae to occur in both occupations. Mikheev (1968) described bursitis in the knees of parquet floor layers on Moscow building sites, however, no mention is made of any ankle or foot bursae. Fig. 2 illustrates the usual working posture of the case described and shows how this area of the foot makes constant contact with the floor on which he is working.

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REFERENCES

1 Hunt T A. Tissue reaction to pressure stresses in miners, Practitioner 1974; 213: 189-194.

'THE SCIENTIFIC BASIS OF THE CARE OF THE CRITICALLY ILL'

An international meeting will be held in Manchester, 5-8 September 1984, to honour the retirement of Professor H B Stoner, MD, FRCPath, FRCS, as Director of the Medical Research Council Trauma Unit.

Topics for discussion include: The local response to injury, metabolic changes after injury, the nutrition of the critically ill, role of the central nervous system in the response to injury, the pathogenesis of complications and the modification of the response to injury.

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