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-calcanem 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 position. Many reports have been made about occupational bursae in miners particularly those involving the knees. 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 placed.
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.

Acknowledgements

We thank Brig P K Coakley FRCS/RAMC for permission to publish this case, Lt Col Coull FRCS, RAMC and Col J B Stewart MRCPath, RAMC for much helpful advice. The photographic work was by the Department of Clinical Measurements, Cambridge Military Hospital and the Department of Medical Illustration, Royal Army Medical College, London.

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J R Army Med Corps 1983 129: 48-49
doi: 10.1136/jramc-129-01-14

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