

An Additional Note on Malignancy in Plantar Ulcers in Leprosy¹

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In their paper on squamous cell carcinoma in plantar ulcers in leprosy Job and Riedel (¹) stated that "Carcinoma arising out of plantar ulcers seems to be extremely uncommon." It appears that this statement needs to be modified in the light of more recent experience. During the last two years four more cases of squamous cell carcinoma arising out of plantar ulceration have been observed. One case report is given below.

CASE REPORT

A female patient (P. L. H. & H. No. F 291) aged 30 years was admitted at the Purulia Home and Hospital for ulcer treatment on 12 December 1964. The duration of her leprosy was seven years. She had had sporadic treatment at home. At the time of admission all skin lesions were resolved. There was no sign of activity of the disease. Multiple smears were negative for acid-fast bacilli. She was classified as an arrested case of tuberculoid leprosy.

Besides unilateral lagophthalmos, ulnar-median paralysis in one hand, and claw toes in both feet, she had a large ulcer on the plantar aspect of the right heel. This had developed three years previously, presumably from an ulcerated crack, and had never healed completely. The foot was slightly warm and tender, and the ulcer showed sluggish, unhealthy granulation tissue with sloughing fascia and soft tissue covering its floor. On probing, the bare surface of the calcaneus was felt. There was discharge of foul smelling, thin pus from the ulcer and a sinus at the lateral

malleolus. Superficial sensation was completely lost, but some deep sensation remained. The inguinal lymph nodes were enlarged, tender, firm, and discrete.

Conservative treatment by debridement, immobilization on an elevated splint, and magnesium sulfate-glycerine dressings, did not materially improve the condition. On 22 February 1965, a large multilocular abscess in the inguinal area, which involved several lymph nodes, had to be opened. The surrounding skin and soft tissues were indurated. The pus contained no acid-fast bacilli. Subsequently the abscess cavity became smaller, but did not heal completely. As the heel ulcer did not show any signs of improvement and the chronic osteomyelitis of the calcaneus persisted, a saucerization operation was performed on 19 March. At the same time a biopsy specimen was taken from the skin at the edge of the ulcer. Histopathologic examination showed epithelial tissue invading deeper structures and many cell nests. The ulcer did not heal after the operation. Fungating granulation tissue formed, overhanging at the edges. As there was a strong suspicion of malignancy, an inguinal lymph node biopsy was made. This revealed secondary squamous cell carcinoma. A below-knee amputation of the leg was performed, followed by a block dissection of the inguinal lymph nodes. A radical procedure was impossible, as the whole region, including the inguinal ligament, was already involved and tumor masses had spread into the right lower abdominal cavity.

In August 1965 chest x-ray examination showed secondary nodules in the lungs. On 9 September 1965 the patient died from general cachexia and respiratory insufficiency.

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This case is reported in some detail as it is an instance of a relatively fast-growing malignant tumor that had developed in a chronic plantar ulcer of only three years' duration, and had formed pulmonary metastases, a phenomenon uncommon in squamous cell carcinoma. Besides the case here reported, three more cases of malignancy arising from plantar ulceration in leprosy have been observed in Karigiri during the last two years (2).



FIG. 1. Ulcer with fungating edges, refractory to five months' conventional treatment.

It is concluded that the occurrence of four cases of squamous cell carcinoma in plantar ulceration in leprosy within two years, and the case history reported in this paper, are evidence that (1) malignancy in plantar ulceration in leprosy is not quite as rare as is generally believed, and (2) that it may develop sooner than expected. These facts emphasize the need to bear in mind the possibility of malignant change in plantar ulceration, and the importance of early detection. Long-standing ulceration (three years or longer), fungating growth, size out of proportion to the causative mechanism, and poor response to adequate treatment, should arouse suspicion.

Biopsies from the edge of the ulcer and regional lymph nodes will confirm the diagnosis.

SUMMARY

The recent occurrence of four cases of malignancy in plantar ulcers in leprosy, one at the Purulia Home and Hospital, and three at the Schieffelin Leprosy Research Sanatorium, Karigiri, is reported. One of these is described in detail. The need for early detection is emphasized.

RESUMEN

Se informa del hallazgo reciente de cuatro casos de lesiones malignas de úlceras plantares en enfermos de lepra, uno en el Purulia Home and Hospital, y tres en el Schieffelin Leprosy Research Sanatorium, Karigiri. Uno de estos casos se describe en detalle. Se pone énfasis en la necesidad del descubrimiento temprano.

RÉSUMÉ

On rapporte ici l'apparition, il y a peu de temps, de quatre cas de tumeurs malignes au niveau d'ulcères plantaires dans la lèpre. L'un de ces cas est survenu à l'hôpital-hospice de Purulia (Purulia Home and Hospital), et trois au Schieffelin Leprosy Research Sanatorium, à Karigiri. Un de ces est décrit en détail. On insiste sur la nécessité d'une détection précoce.

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REFERENCES

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2. JOB, C. K. Personal communication.