

Lymphoma Cutis

REPORT OF A CASE

BY

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I cannot recall having seen a *lymphoma cutis* with such a widespread distribution and effecting almost the entire skin. I therefore consider that it might be of interest to our readers to record the details of this case.

ILLUSTRATIVE CASE

Patrick Garne, an African, was admitted to Harare hospital on 23rd March, 1965, for "further leprosy investigation." He was about 30 years of age and came from the Bindura district. He could not speak English, but he gave a good account of his illness in the vernacular. He stated that he was in very good health until about six weeks before his admission to hospital, when he developed a rash which rapidly spread to cover almost his entire body surface. He sought treatment and was given a course of injections, the nature of which remained unknown to him. He thought that they might have been of some help as the lumps seemed to become a little smaller. But in reality the swellings were becoming larger and although he felt no pain and his general condition remained good, he was referred to Harare Hospital.

On examination the patient was fairly well nourished and looked fit except for his many nodules which covered him so widely. He never complained of any pain except a mild itchiness of the lumps. He ate well. His temperature was not raised. Both his heart and lungs were normal and the chest X-ray was clear. The blood pressure was 95/60 and pulse 80 per minute and regular. Neither the liver nor spleen could be felt. The oral cavity and tongue were free of any abnormality.

The most striking feature was the widespread distribution of lumps of varying size which involved the entire head, neck, trunk, upper extremities and thighs. (Figs. 1 and 2). There were also a few lesions on his legs. The typical nodule was spherical in configuration, measuring from one to three cm. in diameter and was elevated to a height of about two to 10 mm. but there was great variation in shape. The separate tumours were firm and fixed and continuous with the skin, but freely movable over the subcutane-

ous tissues. No changes could be detected in the overlying epidermis in the great majority of the nodules but in a few the skin had a slightly

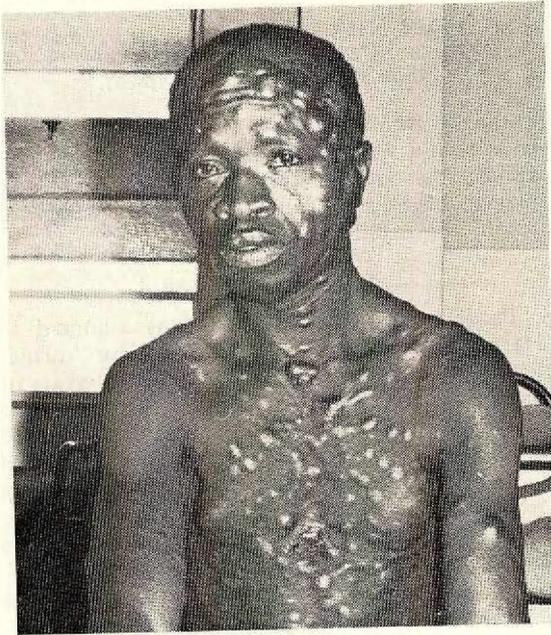


Fig. 1—The lumpiness as seen from the front.



Fig. 2—The very gross extent of the lesions as seen on the patient's back.

inflamed or "reddened" appearance. Both breasts were enlarged due to the marked infiltration by the nodules, the left being much more enlarged than the right. The lower palpebral conjunctiva in the right eye was swollen and reddened due to the presence of a nodule at this site.

A number of laboratory investigations were done. His haemoglobin was 87 per cent. (13.0G per cent.). The total leucocyte count was 5,800/cmm. Neutrophils 31 per cent.; lymphocytes 63 per cent. and eosinophils six per cent. Urine: no albumin or sugar. Leucocytes ++. Stool: ova of *S. mansoni*. Blood urea 25 mg. per cent. Serum Protein 7.8G per cent. (albumin 3.9G per cent. and globulin 3.9G. S. calcium 9.15 mg. per cent. Wassermann reaction of the blood negative. Mantoux reaction negative. Chest X-ray clear.

When we examined the patient we considered two conditions seriously; the first leprosy and secondly a lymphoma. Yet we had to admit that we had never seen such large nodules in Hansen's disease. That leprosy however was a possibility was suggested by another senior physician of the hospital staff who had a good experience of leprosy. An ophthalmic surgeon who was asked to comment on the conjunctival lump in the right eye remarked; "both look like leprosy to me." The reddened surface of many of the tumours bore some resemblance to that seen in leprosy. Two smears taken from the lesions themselves and also a nasal smear showed no lepra bacilli.

When Dr. Greig, the Government Radiotherapist saw the patient, he remarked: "I have never seen this before. It certainly isn't the *homme rouge* type of Hodgkin's disease or any familiar type of *mycoses fungoides*. Leprosy also sprang to mind—but there is no response in six days to the Dapsone."

The decision to put the patient on Dapsone was made after another clinician supported a diagnosis of leprosy, but as there was no improvement after six days, we decided to do a biopsy. The initial biopsy appearance was not conclusively diagnostic, though it probably excluded leprosy. A second biopsy was therefore performed.

The histological report was as follows:—"the original biopsy (889/65) shows a patchy dense dermal infiltrate of histiocyte-like cells and numerous karyorrhectic cells. Although nerves are surrounded by infiltrate, they are not infiltrated nor damaged. There is a distinct band of unaffected connective tissue under the epidermis

which is not atrophic. Acid-fast bacilli are not seen in a Ziehl-Neelsen stained section. For these reasons, leprosy appears improbable. The repeat biopsy is very revealing. Firstly, the epidermis is not affected and the clear subepidermal zone is also present. The cells of the infiltrate are much more distinct and show quite frequent mitoses. The dermal infiltrate is also much more diffuse. This is almost certainly a *lymphoma cutis*, possibly of reticulum cell type. Spiegler-Fendt sarcoid is a remote possibility but structures resembling lymphoid germinal centres are not seen. The absence of epidermal involvement excludes *mycosis fungoides*' (Fig. 3).

COURSE

The patient was referred again to Dr. Greig, who recommended that he be given a course of Mustine. On 10th April, 1965, he was given 30 mg. of the drug over a period of five days, starting with 20 mg. It was given intravenously diluted in 20 ml. normal saline. The next day the patient was pyrexial with a temperature of 103° F. and he began to run a swinging and high fever for several days. On 14th April a further 10 mg. Mustine was administered. The fever was severe, usually being about 103° F. It began to subside a little for two days before his death on 22nd April, 1965. However, it was quite remarkable how rapidly all the lesions began to disappear. Everyone was most impressed with the result (Fig. 4). It was difficult to believe that a drug could produce such a reduction in the size of the lesions (see photograph). Apart from the fever, we soon realised all was not well, as he was fast becoming anaemic, for which he was given blood transfusions as well as intravenous hydrocortisone. On 14th April the haemoglobin was 45 per cent. and 6.6 G. per cent. Leucocyte count 3,800 (neutrophils 34, lymphocytes 66 per cent.), and from then on the patient began to deteriorate rapidly, and despite blood transfusions and steroid therapy he passed away on 22nd April, 1965.

COMMENT

A lymphoma is a malignant tumour which arises in the lymphoid reticular system and consists of immature and mature cells of the lymphoid reticular system. It is believed that the lymphoid-reticular stem cell which is the mother cell may differentiate itself either into a lymphoid cell or a reticulum cell. As a rule lesions in lymphoma are multiple from the start, but occasionally it starts as a single lesion. Although the lesions may be multiple rarely does dissemination take place by metastasis.

Cutaneous tumours occur in all types of lymphoma, but mostly in stem-cell lymphoma, reticulum-cell lymphoma and lymphoblastic lymphoma. The tumours may be clearly demarcated from the surrounding tissue but as a rule small accumulations of cells extend from the main tumour between the collagen branches.

REFERENCE

- LEVER, W. F. (1961). *Histopathology of the Skin*, 3rd Edition, p. 600. Pitman Medical.

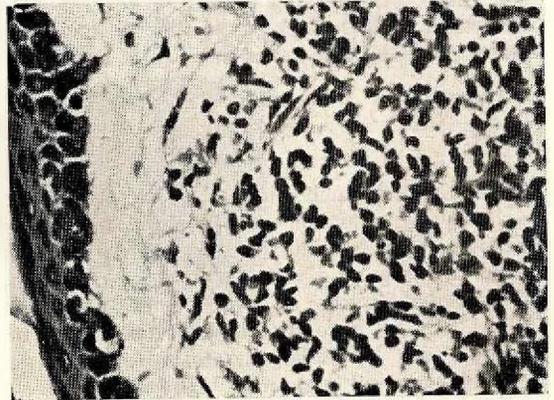


Fig. 3—Observe how the epidermis itself has escaped the lymphomatous growth.

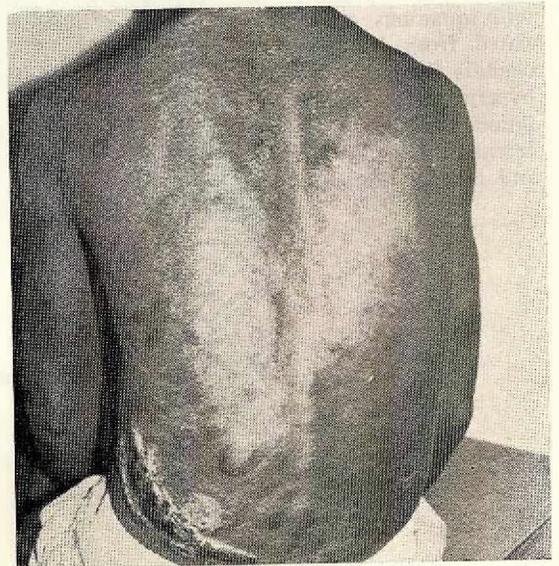


Fig. 4—Remarkable response to mustine. The lesions have virtually melted away.