nature of which is clinically doubtful can in a few moments be proved to be syphilitic, and so much valuable time may be saved and the annoyance and discomfort of secondary manifestations prevented.

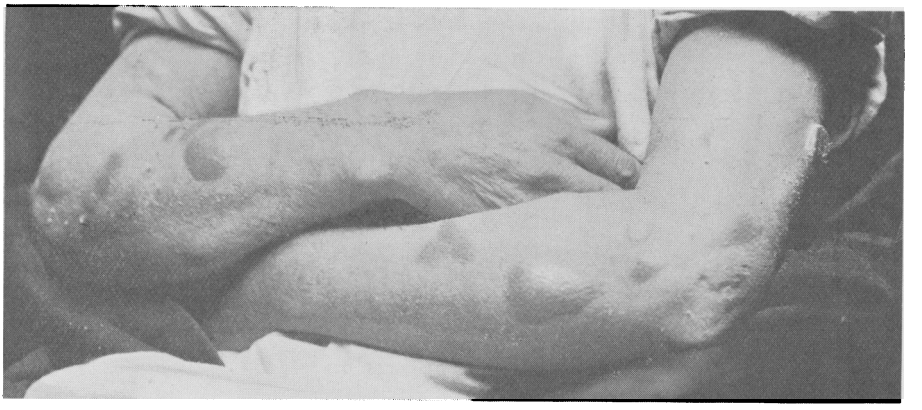
I am indebted to Dr. Gastou for the diagrams of scrapings from chancres, papules, and mucous plaques from which the lantern-slides were kindly prepared by Dr. Kerr in the Pierse-Duncombe Laboratory at St. George's Hospital; and also to Mr. J. W. Ogilvie for his kindness in lending me two complete outfits for the ultra-microscope and for coming here to-night to help me.

Case of Mycosis Fungoides.

By J. L. Bunch, M.D.

The patient, a man aged 50, noticed in October, 1908, some scaly patches on his limbs. These patches, which were itchy and irritable, increased in size and resembled eczema, except that they were very sharply defined. The whole of the trunk and limbs became gradually involved in a diffuse superficial infiltration, the pruritus increased, and softish granulomatous tumours appeared. The first one was noticed in March, on the front of the left leg, and increased gradually in size until, according to the patient's account, it became as large as a cricket-ball. Numerous other tumours appeared, the largest being on the limbs. When he first came to University College Hospital, on July 23, 1909, the trunk, arms, and legs presented numerous well-defined infiltrated patches, varying in size up to that of a hand or larger, and of a reddish colour. These patches were dry and very scaly; so scaly, in fact, that by moderate friction it was possible to collect a small pile of scales. These lesions resembled a dry eczema, except for this very sharp definition. There was very troublesome pruritus in the region of these patches. There were numerous tumours on the limbs, flattish, convex in shape, reddish in tint, softish to the feel, slightly raised above the surface, and of various sizes up to a diameter of about 3 in. Some of these tumours were breaking down in the centre, and one on the back of the left arm had a typical fungating, mushroom-like appearance. This tumour was about $1\frac{1}{2}$ in. in diameter and projected $\frac{1}{2}$ in. from the skin, spreading out at the top from its pedicle, which was of smaller diameter. The secretion from the ulcerated surface was of a yellowish, purulent nature, but not particularly offensive. The trunk did not show any definite tumours,

but numerous softish infiltrations of a reddish or purplish tint. The primary tumour on the left leg, which was said to have been the size of a cricket-ball, had apparently undergone some involution, for it did not then project more than ½ in. from the skin, and was flattish rather than round. The patient said that since the onset of the disease he had been very nervous, could not sleep or work, and was very tremulous. On examination, the hands and tongue showed marked tremor; but the knee-jerks were present, his pupils reacted, and there seemed to be no loss of sensation. The nervous symptoms appeared to be functional, but it was not clear whether they could be ascribed to his work. For twenty-five years he had been employed in the generating station of a large electric-light plant, but stated he had



Mycosis fungoides.

never had a severe shock from contact with a dynamo or brush. In spite of this, however, he was now nervous of handling the machinery.

His father is alive, aged 82, and his mother died when 78 years old.

He was admitted to University College Hospital on July 28, 1909. The fungating tumour was treated with boracic fomentations, and he was ordered alkaline baths three times a week and a calamine cream to be applied continuously to the infiltrated areas. Intramuscular injections of arsacetin have been given during the whole of his stay in hospital, at first in doses of 7 gr. per injection, and afterwards in doses of 3½ gr. These injections were given three times a week, and he has had in all 87½ gr. injected without causing anything more than

slight discomfort at the time of injection. He has also had regular treatment by X-rays and the constant current applied occasionally to his spine.

Within a month of his admission to hospital the tumours showed considerable diminution in size; they became flatter, and, as involution proceeded, the skin covering them became more deeply pigmented, until it became a dark brown as the tumours finally disappeared. The limbs now show many darkly pigmented areas, marking the sites where tumours have been. The fungating tumour on the left arm also became gradually smaller, until it was finally level with the skin, and the ulcer healed up, leaving a well-marked white scar surrounded by a narrow chocolate-coloured circular band. About six weeks ago the moustache area became erythematous, infiltrated, scaly, and so irritable that it prevented sleep. A tumour then developed, about the size of a hazel-nut, an inch above the left angle of the mouth; but this is now much smaller, being almost level with the skin, and is darkly pigmented. Two recent tumours of smaller size are also present at the back of the neck; they are still red, but are getting smaller. A month ago some follicular lesions appeared on the scrotum, spreading irregularly down the thighs, and also on the wrists. These lesions differed entirely from the original mycosis tumours in that many of them developed yellow heads, were obviously pustular, and on culture showed the presence of *Staphylococcus aureus*.

Sections of the tumours showed hyperacanthosis with elongation of the papillæ, infiltration of the papillary body with lymphocytes and some small plasma-cells in a fine connective-tissue network. It is noteworthy that sections of apparently healthy skin taken at some distance from the infiltrated areas also showed these changes, though in a less marked degree. The histological appearances point rather to the lesions being of the nature of a cutaneous lymphadenitis than a variety of sarcoma.

Dr. F. DE HAVILLAND HALL in 1895 had shown at the Clinical Society[1] a case in which the tumours had undergone very extensive ulceration, and did not respond to any treatment. The pharynx and larynx were affected; this, he thought, was unusual in mycosis fungoides. The patient, who attended the hospital, drifted away and was lost sight of; when he left the hospital, he seemed to be going downhill. The sections of the tumours were made by Dr. Hebb. No animal or vegetable organism was found.

[1] *Trans. Clin. Soc. Lond.*, 1895, xxviii, p. 268.