# BRIEF REPORTS

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LEPROSY AND VON RECKLINGHAUSEN'S DISEASE

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The differential diagnosis of leprosy and von Recklinghausen's disease has been discussed by various authors, but the writers have found no reference to the concurrent development of these two disease entities in the same individual. The present report of a case is made as a matter of interest.

History.—The patient is an American-born Mexican male, about 42 years of age, an unmarried farm hand, in poor health and somewhat emaciated. Has no knowledge of any contact with leprosy. Father died at the age of 75, mother at 66, and one sister at 38; causes of death unknown. Three brothers and two sisters are living and in good health. Has no recollection of having had the usual diseases of childhood. Venereal history negative.

In 1917 the patient noticed several nodular masses on the abdomen. Similar tumors have appeared over the whole body, face, scalp, and on the limbs; these have caused no pain or inconvenience. He has noticed no thickening of face or ears, anesthesia, dryness of skin, or loss of hair over face or limbs. His chief concern is general weakness, of two years' duration and progressive, and loss of weight amounting to about 30 pounds.

Physical examination: Height, 6 feet 5 inches; weight, 115 pounds. Moderate general alopecia, with many small, soft nodules from pin-head to pea size, scattered over scalp. These nodules are of the same color as the scalp. Eyebrows and cilia very scanty; eyes negative. External ears much enlarged, thickened and "doughy," and of a purplish brown color from lepromatous papules and nodules. Face diffusely thickened, with many discrete, firm, dark brown nodules and a few soft copper-colored nodules. A few small, light brown plaques on mucesa of palate and pharynx. Tonsils negative. Lungs have râles, bronchial and broncho-vesicular breathing, and increase of vocal and tactile fremitus; right upper chest wall is markedly retracted. There is generalized lymphadenopathy. Ulnar, great auricular, and peroneal nerves palpably enlarged. Anesthesia over areas in hands and feet; diminished sensation in distal halves of fore-arms and legs, and in many of the firm nodules over face and body. Early contraction of the little fingers.

The skin changes are: The abdomen, chest, back, shoulders, buttocks, and upper thighs are covered with discrete, soft, flabby, light brown and coppercolored nodules, ranging from pin-head to walnut size, that are definitely protruding and some are pedunculated. Scattered among the soft nodules are a comparatively few nodules which are flatter, firmer, and darker in color. A diffuse, dry, somewhat scaly, bronzed thickening is present over the entire surface of the limbs and some portions of the lower torso. A moderate number of solid, dark brown macules, from dime to half-dollar size, are scattered over the limbs. Legs and feet dark, thickened and scaly (''ichthyoid''). Hair over limbs entirely missing. Loss of perspiration over almost the entire surface of limbs; diminished perspiration over the entire remaining skin surface except scalp.

Laboratory findings.—Smears from nodules of face and body positive for Mycobacterium leprae. Wassermann reaction negative. Other findings less important. X-ray examination shows marked infiltration of upper lobe, right lung.

Clinical diagnosis.-Leprosy, mixed; von Recklinghausen's disease; pulmonary tuberculosis.

Histological.—Section from a small tumor shows the epidermis intact, somewhat thinned, the papillary projections shortened. Pigment abundant. Corium thickened, with many fairly large cells with cytoplasm consisting of a lacy network of chromatin and small, eccentrically placed nuclei; these cells tend to form groups, usually surrounded by loose connective-tissue cells. There is a sparse leucocytic reaction of monocytes and lymphocytes. Capillary blood vessels numerous. Deeper, there is an atypical proliferation of fibrous connective tissue; the nuclei of the cells are elongated, some large, others small and deeply stained. The intracellular fibers are fairly well developed and loosely interwoven, but massed together in a very disorderly fashion. In this mass of proliferating connective tissue may be seen areas consisting of masses of the cells as noted in the corium. These areas also show sparse leucocytic reaction.

A section from this same small tumor shows innumerable acid-fast bacilli scattered throughout a large part of it. The organisms are most numerous in the corium, but many are seen among the neoplastic connective-tissue cells. Characteristic globus formation is frequently seen, both in the tumor portion and in the corium proper.

Microscopical diagnosis .- Fibroma and leprosy.

#### SUMMARY

A case record is submitted, detailing, briefly, the study of an individual presenting an indiscriminate intermingling of pedunculated fibromata and leprous nodules, scattered almost over the entire body of the patient; some of the fibromata invaded the hairy scalp. The unusual size of some of the pedunculated tumors and

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the histologic picture clearly showed them to be fibromata, even though they were invaded by large numbers of *Mycobacterium leprae*. When the smaller tumors were not pedunculated, they could not be definitely classified from gross inspection as either fibromata with leprous invasion or leprous fibromata, but histologic differentiation was practicable when the papillary layer was not involved, as destruction or distortion of the papillary layer of the skin is considered a part of the histology or leprosy.

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