

A CASE OF LEONTIASIS OSSEA.*

BY J. PAYSON CLARK, M.D.,

Physician for Diseases of the Throat, Massachusetts General Hospital; Instructor in Laryngology, Harvard Medical School.

BEFORE showing this case, perhaps a few words about this rare and obscure affection would not be out of place. Leontiasis ossea is characterized by a diffuse hyperostosis, as a rule bilateral and symmetrical, localized principally in the bones of the face and consecutively in the cranial bones. It begins almost always in the superior maxillae, and by the forward growth of these bones tends to give the leonine cast of countenance from which it gets its name. In extreme cases the growth of bone is such that the head may attain a weight eight times that of the normal head. Three types have been described: (1) Where the whole head is affected, (2) where the middle and lower portions of the face are affected, (3) where only the lower jaw is affected. The bone is sometimes soft but may be of ivory hardness. Other tissues are not hypertrophied in any case.

Symptoms. — The functional symptoms are little marked. There may be, as the case progresses, headache, impaired power of mastication, disturbance of sight, breathing, smell, taste and convulsions. The disease begins in youth. The onset is insidious and the progress very slow. The duration may be twenty years or more. It never recedes. Death follows obstruction of the cavities of the face, compression of the brain, irritation of the meninges. The openings at the base of the cranium may be diminished and obliterated. Sex and heredity are not important, and the etiology is as yet absolutely unknown. Virchow compares leontiasis to elephantiasis of the soft parts, but this comparison seems to have no etiological value. Baumgarten and others think the disease may be allied to acromegaly and gigantism and, therefore, be due to some derangement of the pituitary body. This view is supported by the fact that some of the giants who have been reported have also had leontiasis. Injury has been mentioned as a causative factor, but is at most a doubtful one. It is probable that the disease is due to some derangement of the processes of growth; in other words, that it is of trophic origin.

The patient, as you see, is a small man; in fact, considerably under-sized, although well nourished and apparently in good physical condition. His only complaint is that he cannot breathe through his nose, but he also says that the tears do not flow freely from his right eye into the nose and that by pressing near the inner corner of the eye (lacrimal sac) he can express a little fluid. There is probably some dacryocystitis. Before describing the present appearance of his face, I should like to review his history, as it seems to have a bearing on his present condition.

S. J., the patient before you, entered the Massachusetts General Hospital in May, 1899, at the age of eighteen. He gave his occupation at that time as a blacksmith's assistant. In 1896 he was thrown from a wagon, knocked senseless and his left leg broken. Since the accident the right side of the face has been gradually swelling. He says he never had any pain in

the jaw or any trouble with mastication. The swelling was first noticed under the body of the jaw. It has been gradually increasing. There is no trouble with the teeth or bulging in the mouth.

Examination. — Well-developed, fairly well-nourished boy. Right cheek presents a swelling which is hard and connected with the lower jaw. It is not tender or painful. He was operated on under ether. An incision three and a half inches long, following the under border of the body of the right lower jaw, was made. The new growth of bone was chiseled away as thoroughly as possible. The growth was very hard, but there was nothing to suggest malignancy. The healing of the wound was uneventful.

Diagnosis. — Osteoma of the jaw.

The patient next came under observation in August, 1905, when he came to the Throat Department with the history of having fallen from a height of three feet two days before and not being able to breathe easily through the nose. Examination showed considerable swelling in the nose, but no bulging of the septum. A note two days later says: "Both nostrils occluded by a bony thickening of the walls. X-ray taken." Aug. 15: "X-ray shows dense, bony growth of the lower jaw." Nothing is said in the records about the x-ray picture of the upper jaw and I could not find the plate taken at this time. The condition was evidently then present in the upper jaw, but its significance was not appreciated at that time. He was referred to the surgeon for the tumor of the lower jaw, but no operation was done. His next appearance was in March, 1908, when he came in on account of nasal obstruction. An examination showed the nasal fossæ apparently filled by a bony growth from the outer walls.

Dec. 31, 1909: "Condition of the nose is the same and tumor of the lower jaw the same size. X-ray taken."

He came again in February, 1909, when an operation was proposed to relieve the nasal stenosis. At that time I advised against an operation, for fear of stimulating a more active growth of the bone. Another x-ray was taken at this time, and again on Nov. 5 and 30. These plates all show, some better than others, the condition, i. e., the antra are filled with a dense growth which has encroached on the nasal fossæ so as to completely occlude them. These opaque masses can also be seen mounding up into the orbits. In the lower jaw the growth is limited to the right side, the left jaw being normal as far as one can tell by physical examination and the x-rays. In this respect the case is atypical. I showed the patient first at the regular monthly meeting of the Throat Department in February, 1909, as a case of leontiasis ossea, but did not publish the report at that time. The patient can hardly yet be said to have a leonine cast of countenance. The nose is already, however, broadened and flattened by the bony growths in the antra, increasing anteriorly. Apart from the disfigurement caused by the tumor of the lower jaw, the patient's only complaint is inability to breathe through the nose. I have changed my mind in regard to the advisability of operating on his nose to give him some relief in breathing, influenced in this respect by Dr. Kanavel's article. If the bone is not too hard, I believe that some of the lateral walls of the nasal fossæ can be chiseled away and enable him to breathe through the nose at least for a time. Operations of this sort do not apparently make the bone tumors grow any faster in this disease.

REFERENCES.

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 Mauchaire: *Maladies des Os*, 1908, p. 257.
 Kanavel, A. B.: *Surgical Interference in Leontiasis Ossea*. Surg., Gynec. and Obstet., vol. iv, p. 719, 1907.

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