

some substantiation ere it can be accepted, even admitting that lupus has a specific organism.

Atrophic rhinitis, like lupus, is undoubtedly a spreading disease—it may extend to all the accessory and adjacent cavities, it may even involve the larynx, but it has never crossed the muco-cutaneous boundary. It occurs, like lupus, chiefly in patients who are the subjects of a tuberculous or strumous taint, and it tends to persist, but not to kill. In its fundamental histological features—the presence of small cell tissue of a low type—it resembles lupus and tubercle, but it does not ulcerate spontaneously; its end is sclerosis.

Lupus has been described as an attenuated form of tuberculosis. Are we, then, to consider atrophic rhinitis an attenuated lupus? There is certainly a sufficient resemblance between these diseases, both histologically and clinically, to justify further investigation.

*Rhinoscleroma* - Rhinoscleroma, albeit an extremely rare disease in this country, having some resemblance to atrophic rhinitis in its histology, demands a short notice. Its essential feature is the presence of slowly-growing, small cell tissue, containing, according to Cornill,\* small, highly refractive, hyaline bodies. It tends to spread in all directions, including skin, tongue and larynx, but does not ulcerate. In the hands of Frisch and Stepanow it has afforded positive results to cultivation and inoculation experiments.

*Incidental Pathological Changes.*—The most strikingly uniform incidental change observed was the disappearance of lymphoid structures. In fifty-six of sixty cases the faucial and pharyngeal tonsils had entirely disappeared, whilst in the remaining four they were very small. The lingual tonsils were equally diminutive, for in all well-marked cases the pharyngo-glossus was perfectly smooth. This shrinking and disappearance of lymphoid structures is, I venture to submit, a significant feature of the disease, and has something more than a mere coincidental relation to the intra-nasal changes.

In most cases the teeth were more or less decayed.

The thyroid gland could not be distinguished by palpation in twenty-eight cases, but in two instances it was distinctly enlarged and resilient.

Whilst conjunctival complications were not observed, non-suppurative middle-ear disease occurred in eight cases. (Wyss found ear trouble in forty-seven cases out of sixty.)

In ten instances bare bone was distinctly felt on probing the anterior ethmoidal cells.

Anæmia was well marked in twenty-seven cases.

*Etiology and Pathology.*—However interesting the local changes may be, the origin of atrophic rhinitis must not be considered solely upon evidence afforded by them: it is perhaps expedient, therefore, that I should first put before you the question, Is the disease *atrophic rhinitis ab initio*?

It would be tedious to quote all the different views which have been advanced in answer to this question, but so many writers of eminence have expressed themselves in such definite terms that, by way of illustration, I must draw your attention to one of the most recent articles.

In Burnett's "System," J. N. Mackenzie\* hesitatingly answers this question by a negative. He considers that atrophic rhinitis "always appears as the sequel of a pre-existing catarrhal inflammation," and that the rapidity with which it sometimes passes from the hypertrophic to the atrophic form is, in all probability, proportional to the presence of some constitutional taint, such as syphilis.

Although we not infrequently may see a well-marked atrophic process at work in one nostril, coincidentally with distinct prominence of the turbinal in the other nostril, this does not necessarily imply that atrophic rhinitis is always preceded by true hypertrophic rhinitis. What we see in such a case is the early inflammatory thickening, which, here, as elsewhere, is so frequently the preliminary thickening of a sclerotic process. There is a wide histological difference between this enlargement and that of cavernous or erectile hypertrophy, which Mackenzie holds to be the constant and necessary antecedent to the atrophic changes. Most careful cross-examinations have only afforded me a preliminary history of nasal obstruction with profuse catarrh in three instances, and histologically I have entirely failed to trace the changes which Mackenzie describes as connecting degener-

\* Burnett's "System of Diseases of the Ear, Nose, and Throat," Vol. I., p. 672.

\* *Progrès Médical*, 1883, p. 857.