

disease. An anæmic larynx with the turban-shaped or hypertrophied epiglottis, is also considered by some as sufficient evidence for a positive diagnosis. The progress of tubercular hypertrophies is often exceedingly slow, and they sometimes remain one or two years without much change. Ulcerations are usually a later manifestation, and may be primary or secondary. The former are superficial, and probably result from a surface infection. The latter are much deeper and are accompanied by a greater loss of tissue. Tubercular ulcers are usually multiple and appear as minute yellow spots dotted over the surface; their multiple character is diagnostic of tuberculosis. The vocal cords and epiglottis are favorite locations for their appearance; they impart a serrated appearance to the edges of the former, and attack the epiglottis on its laryngeal surface. This is a contrast to syphilitic ulcerations which usually invade the lingual surface of the epiglottis.

Tubercular neoplasms of the larynx are very rare. A recent article published by Dr. J. Payson Clarke in the *American Journal of the Medical Sciences* for May, 1895, gives an excellent clinical picture of these growths. They occur in the form of smooth, round tumors of variable size and appearance, some being single, others multiple. They are usually of light gray color and occur on the vocal cords, ventricular bands and in the ventricles. They grow slowly, do not readily ulcerate, and may persist for years.

It is difficult to determine the nature of these growths, as they may readily be mistaken for fibromata or papillomata. The history of the growth, and the general condition of the patient, and lastly the microscope, must then come to our assistance.

In determining the nature of a laryngeal affection which is supposed to be tubercular, we must not alone consider the symptoms referred to in the larynx, but also the general condition and history. This is important, as laryngeal tuberculosis is usually preceded by pulmonary deposits. The microscope should be employed for the detection of the tubercle bacillus. The writer has never seen them absent in tubercular laryngitis. The temperature should also be carefully noted. Some difficulty may be experienced in making a diagnosis when there is syphilitic history, and especially if there is some improvement in a case of laryngeal

tuberculosis from the administration of potassium iodide. Syphilis and tubercle may both be present. It is, therefore, important in doubtful cases to administer the iodide in large doses until improvement ceases.

Having made a diagnosis, a suitable treatment must be selected; before considering this, however, we will glance at tracheal tuberculosis. This is a very unusual location for the manifestation of tuberculosis, and is nearly always accompanied by a laryngeal deposit. This at least has been so in six cases seen by the writer; two in his own practice and four under the care of colleagues. In all, the manifestations were first in the form of good-sized superficial ulcers, with great thickening of the surrounding tissues at the upper part of the posterior wall of the trachea. At first, only the mucosa of the posterior wall is affected, but later the cartilaginous rings are implicated. The chief distinctive symptoms in these cases were the constant burning sensation referred to in the upper part of the trachea and back part of the neck in the region of the spinous process of the seventh cervical vertebra. Severe cough of an irritating spasmodic character, was also pronounced. Owing to the narrowing of the respiratory tract, difficult respiration may also be a prominent symptom.

*Treatment of Laryngeal Tuberculosis.* — The local treatment of this affection may be, for practical purposes, divided into three methods, viz.: curettement, submucous injection, and topical applications. Of these, curettement has many ardent advocates, of whom Herying of Warsaw, and Krause of Berlin, have probably had the most experience. A number of curettes of various shapes for laryngeal work have been recommended, and Gouguenheim of Paris, has used a pair of forceps for the removal of the arytenoids; this instrument resembles Hooper's forceps for removing adenoid growths from the post nasal space. Curetting has been employed in all stages of the disease, with varying success. In view of the severity of the procedure, and the possibility of re-infection, it would seem best to limit its use to the scraping of the surface of ulcers and for the removal of hypertrophied tissues in the arrested stages of the disease.

Submucous injections seem to be specially indicated in primary laryngeal tuberculosis, as