TUBERCULOUS LARYNGITIS IN CHILDREN

BY

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The occurrence of tuberculosis of the larynx in children is usually regarded as being extremely rare. This view may be due, in part, to the fact that the symptoms of this disease in children are seldom conspicuous, but probably it is also due in no small measure to the fact that an examination of the larynx of a child is not frequently made. My experience leads me to believe that this examination in a child is not usually difficult, and that where it is performed as a routine among children suffering from pulmonary tuberculosis it will be found that tuberculous laryngitis is not uncommon.

Symptoms.—The symptoms of this disease in children are seldom conspicuous—this has been a striking characteristic of most of the cases I have seen. Indeed, it is not uncommon for all symptoms to be absent and the disease to be only discovered in a routine examination of the larynx. The following case illustrates this:—

Case 1.—M. Y., female, aged 12 years. Admitted 15th September, 1931. In June, 1931, she had developed a cough. On admission she showed disease of both lungs, particularly right: sputum positive.

Laryngeal symptoms: none. Laryngeal examination: in May, 1932, showed inter-arytænoid deposit and some redness and swelling of arytænoids. The condition in September, 1932, still shows these lesions, but the child has no laryngeal symptoms.

More often, however, there is some loss of tone or huskiness of the voice. On questioning the child or even the parents it is not unusual to find that she or they are quite unaware of this huskiness, and even when they recognize its existence it is frequently impossible to obtain any reliable history as to its duration. Huskiness may be the only symptom. It may become more marked as the case progresses, but it does not usually progress to the stage of aphonia that characterizes this disease in its late stages in adults. That this huskiness may persist for long periods I have verified from the fact that I have had patients under my care in whom I have known it to be present for periods of from 1 to 4 years.

Dysphagia is so rare that it can hardly be characterized as a typical symptom as described in the text books. Very occasionally there may be a complaint of slight pain on swallowing but this is seldom sufficiently severe to require treatment, and may be only transitory. I have never met in a child the severe dysphagia that is seen in adults.

Similarly, apart from the cough due to the lung disease, the peculiar ineffectual cough described in books and noted in adults suffering from tuberculous laryngitis is seldom if ever observed in children.

Some pain or soreness of the throat may be complained of, but this is not of frequent occurrence and is usually slight and transitory.

Laryngeal lesions.—The most common lesion observed is a greyish heaped-up deposit in the inter-arytænoid region, with or without redness and swelling of the arytænoids (Case 1). The arytænoids only may be red and swollen in some early cases.

The false cords may be markedly swollen so as almost to obscure the vocal cords, and in addition a greyish deposit may be present on the inner aspect of the swelling. A typical example of this may be quoted.

Case 2.—L. C., female, aged 13 years. Admitted 20th October, 1931. Mother has pulmonary tuberculosis. Patient had measles, diphtheria and whooping cough in infancy. She caught a cold 2 months before admission and has had a cough since. She shows disease of left upper lobe, with positive sputum.

Laryngeal symptoms: huskiness for one week before last examination of larynx (September, 1932). Laryngeal lesion: marked swelling of false cords with rough greyish wash-leather deposit on inner aspect of swelling near the anterior commissure. Posterior ends of vocal cords visible.

There may be some swelling and pink or red discoloration of the vocal cords, and ulceration of the cords. An illustration of this is provided by the following case.

Case 3.—C. L., female, aged 15 years. Admitted May 5th, 1931, with a history of cough since Christmas, 1930, and hæmoptysis 3 weeks later. She showed disease of right lung and upper part of left: sputum positive.

Laryngeal symptoms: huskiness. Laryngeal examination: deposit in inter-arytænoid region. Pink discoloration of both cords. Swelling of right cord with ulceration at the posterior end.

Together with the ulceration, or as a result of it, there may be scarring and deformity of the cords with impaired movement.

In one case under my care some years ago, in which there was considerable lupus of the face, there was thickening and deformity of both cords with marked scarring and deformity of the epiglottis.

Incidence.—In the great majority of cases the disease occurs in children who have active pulmonary tuberculosis, and whose sputum contains tubercle bacilli. As this type of pulmonary tuberculosis occurs more often among older children, so tuberculous laryngitis is found more frequently among these older children. Usually the children are over 10 years of age, but the disease does occur under this age. The cases with the most extensive pulmonary disease are those most likely to be affected, but the disease may occur among those cases in which the lung signs are slight, and in whom tubercle bacilli have not been found in the sputum. All the cases I have seen have been secondary to lung disease. They have been largely among females, but this may be due to the higher incidence of pulmonary tuberculosis among girls. In a small series of cases (11) I published some

years ago I found the incidence was similar in the two sexes. In that series tuberculous laryngitis was present in 12·5 per cent. of those cases of pulmonary tuberculosis with tubercle bacilli in the sputum (9 cases among 72 children). In a recent series there were 18 cases among 48 children similarly affected (27 per cent.).

In the last series examined recently there were 14 cases among 64 children with positive sputa, approximately 22 per cent. The ages of the children examined were from 6 to 16 years, and the ages of the children affected 12 to 16 years.

Prognosis.—The ultimate prognosis of open cases of pulmonary tuberculosis in children, apart from any other fact, is notoriously bad so that it is difficult to say whether the development of tuberculous laryngitis affects it to any marked degree. That the disease may persist for long periods without apparently progressing to any marked extent is evident. I have observed patients for periods up to four years in whom only a slight increase in their symptoms and laryngeal lesions was observable at the end of these periods.

Where it is possible to benefit the pulmonary condition by active measures of treatment (e.g., artificial pneumothorax), or by ordinary routine treatment, one may reasonably expect a comparable improvement in the laryngeal condition. Certainly tuberculosis of the larynx is not a contra-indication for such therapeutic measures as artificial pneumothorax.