Tomography of Larynx in Disseminated Pulmonary Tuberculosis

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Since Dr. Felix Leborgne of Montevideo, in 1936, introduced tomography for the diagnostic study of carcinoma of the larynx, this procedure has become definitely established in the diagnosis of this condition. Some years before him, in 1923, Dr. Henry Courtard had emphasized the importance of a radiographic examination of this organ.

I have had opportunity to undertake tomographical studies in patients with advanced pulmonary tuberculosis who also had laryngeal manifestations visible on simple inspection. I have studied 10 cases of this nature and have found that it is possible to demonstrate with tomography changes caused by the disease, whether they are in the form of a simple inflammation or other types of specific damage. In almost all of the patients there has been agreement between tomographic findings and those noted on standard laryngoscopic examination.

As a note of technical character we are able to point out the following as for the lateral radiography, imprescendible to perform it for the due study, as for the tomography.

Technique

1) For Lateral Radiography of the Larynx:
   200 milli. Ampers
   1/20 second or 10 milli. Amper seconds
   55 kilo volts for 10 to 13 cm. of neck thickness
   160 cm. distance
   Rotating anode tube
   Focusing on the thyroid prominence
   Vocalization in “U”.

2) For Tomography:
   20 milli. Ampers
   3 seconds or 60 milli. Amper seconds
   75 kilo volts or less
   Focusing on the thyroid prominence
   Vocalization in “U”
   Rotating anode tube.

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Figure 1, I. D.: Bilateral extensive caseous tuberculosis, with third degree dissemination on both sides. Occlusion of both ventricles. Laryngoscopic diagnosis: Polypoid granulation, right vocal cord.—Figure 2, B. C.: Bilateral extensive caseous tuberculosis with 3rd grade dissemination. Occlusion of the left ventricle. Laryngoscopic diagnosis: Arytenoidal infiltration (left) and Paresis of the respective vocal cord.—Figure 3, W. G.: Bilateral extensive caseous tuberculosis, disseminated. Occlusion of both ventricles.—Figure 4, M. J. B.: Bilateral extensive caseous tuberculosis, disseminated. Occlusion of both ventricles, with impossibility to recognize their outline or the vocal cords. Laryngoscopic diagnosis: Tuberculous laryngitis, infiltrative-edematous form.
It is necessary to emphasize the following facts: Dr. Leborngne in his book "Cancer of the Larynx," recommends that the films be taken with the patient in the supine position. In this position it has not been possible for us to get satisfactory films. On the other hand, placing the patient in the prone position, excellent results have been possible as can be seen in the illustrations.

A constant tomographic sign in all cases is the subglottic angle, which, as a rule, is rectangular, becomes frankly obtuse, regardless of the degree of tuberculous laryngitis (cases 2 and 3, arrows).

**SUMMARY**

This preliminary communication has been written with the purpose of calling attention to a diagnostic approach. Conclusions as to the clinical value of this method will be reported as soon as observations are gathered on a larger number of patients.

**RESUMEN**

Se ha escrito esta comunicación preliminar con el propósito de llamar la atención sobre un método diagnóstico. Se publicarán conclusiones sobre el valor clínico de este método tan pronto como se acopien observaciones en un número mayor de pacientes.