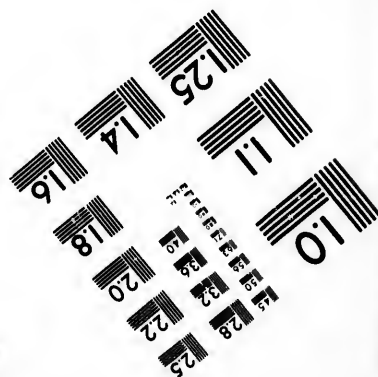
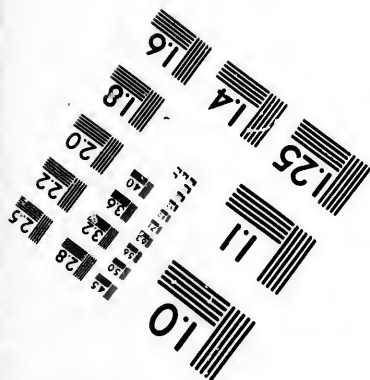
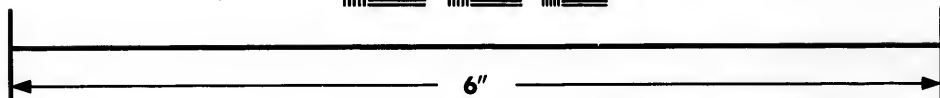
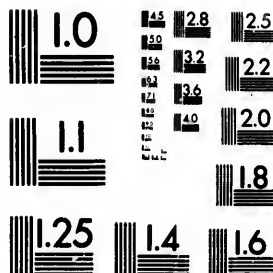


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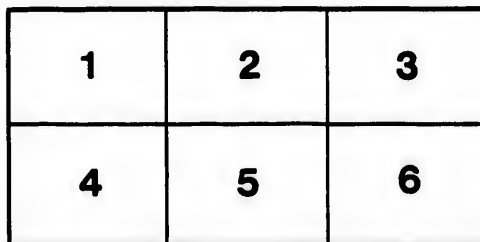
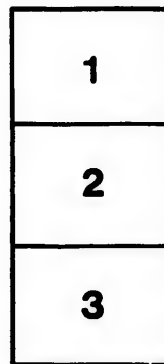
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CARCINOMA OF LARYNX.

BY

H. S. BIRKETT, M.D.,

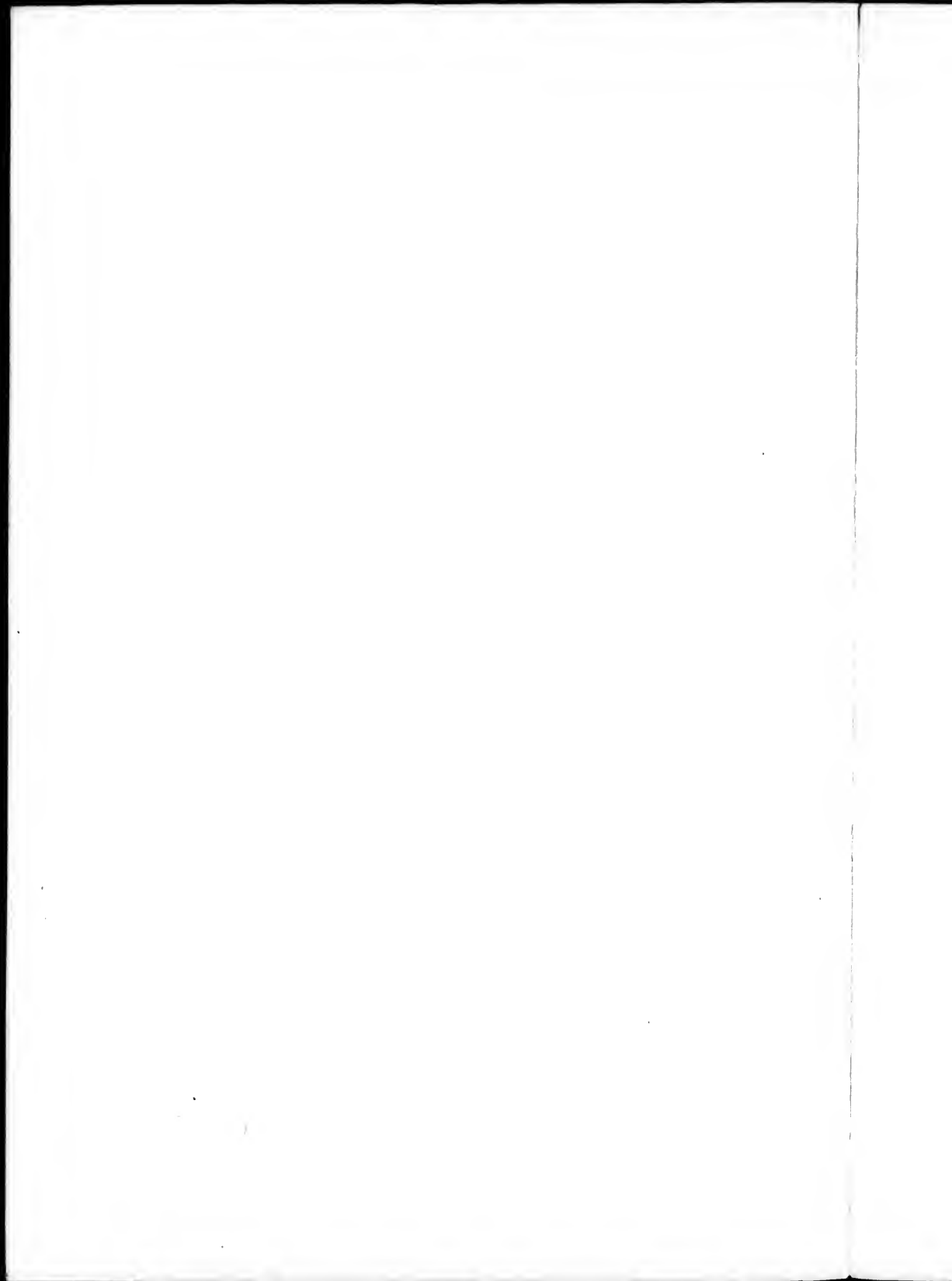
Professor of Laryngology, McGill University; Laryngologist to the Royal Victoria
Hospital, Montreal.

AND

A. G. NICHOLLS, M.D.,

Demonstrator of Pathology, McGill University.

Reprinted from the Montreal Medical Journal, May, 1899.



CARCINOMA OF LARYNX.*

BY

H. S. BIRKETT, M.D.,

Professor of Laryngology, McGill University; Laryngologist to the Royal Victoria Hospital, Montreal,

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A. G. NICHOLLS, M.D.,

Demonstrator of Pathology, McGill University.

The patient whom this specimen concerns was a man of 55 years of age who consulted me at the throat clinic of the Montreal General Hospital six months ago on account of a huskiness which he said he had had for six weeks previous to his first visit to the hospital, due, the patient thought, to his having "taken cold."

Upon examination of the larynx at that time, six months ago, I found the huskiness was due to ulceration of the left true vocal cord on its under surface involving that portion of the cord attached to the vocal process. The extent of the ulceration as far as it could be judged by the laryngeal mirror, showed it to be an ulcer with irregular outlines and about 6 mm. long and 3 mm. broad. The surface was uneven and clean. The surrounding mucous membrane only moderately hyperæmic. The movements of this cord, namely abduction and adduction, were impaired only to a slight degree. There was no swelling of the crico-arytenoid joint of that side. The movements of the right cord were also slightly impaired and the right cord assumed a position nearer the middle line of the glottis, but not sufficiently near to interfere with respiration; therefore no stridor was present.

An investigation into the general health of the patient proved the absence of any tuberculous or syphilitic manifestations. There were no subjective symptoms, other than the alteration in the character of the voice. The patient himself in general appearance seemed to be enjoying good health; being a stout robust looking man. Careful examination of the glands in the neighborhood of the larynx failed to find any of them enlarged. The patient was placed on iodide of potassium in increasing doses, but without any beneficial results as regards the local condition after a period of four or five weeks. The patient was told of the probable nature of his case and advised to keep under strict supervision because of a grave possibility of a sudden attack of œdema of the glottis which might supervene at any time. In fact, preliminary tracheotomy was advised at that time, so as to place the patient beyond the occurrence of any such trouble.

*.Read before the Montreal Medico-Chirurgical Society, April 10, 1898.

I saw nothing of this patient until hastily summoned by Dr. Semple, who told me that the patient whom I had seen at the Hospital was suffering from an attack he thought of œdema of the glottis which would necessitate immediate tracheotomy.

Upon seeing this patient I found him sitting up and breathing with considerable difficulty. Inspiratory stridor was marked; with retraction of the supra and infra-clavicular spaces and also the abdominal wall. His face expressed a great deal of anxiety and he had since my last visit become slightly emaciated. Immediate tracheotomy was advised and the patient removed to the Royal Victoria Hospital as speedily as possible and on his way to the hospital on one occasion his condition became positively alarming, being seized with a spasm of the glottis, but which fortunately passed off in the course of a few seconds. His condition when on the operating table was that of increased dyspnœa and the operation of tracheotomy had to be hurriedly undertaken.

The difficulty encountered in opening the trachea less rapidly than could have been wished for, was due to the unusual depth which the trachea had, even with the head well extended and a pillow supporting his shoulders, for it was found to be at a depth of about $3\frac{1}{2}$ inches from the surface; also another difficulty was the enlargement of the middle lobe of the thyroid. I may say here that the "low operation" was selected, not knowing how much more extensive the disease in the larynx had become since the last time I had seen the patient, five months previously.

On opening the trachea another difficulty was here met with, for it was found that the œdematous condition of the mucous membrane of the trachea had extended even below the site of the tracheal wound and thus it was found that the usual tracheotomy tubes introduced did not reach beyond this œdema, but the introduction of a catheter enabled the respiratory function to be carried on with relief to the urgent dyspnœa. Subsequently an extra long tracheotomy tube was introduced and seemed for the time being to satisfy the necessary requirements.

The patient unfortunately died three days subsequently, the death being due apparently to collapse of the lungs. The post-mortem examination was carried out by Dr. Nicholls, a report of which follows, and shows the site of the disease to be just where seen when the patient was living, and the want of adduction and abduction, especially of the right vocal cord, is proved by the post-mortem examination to be due to pressure along the course of the recurrent laryngeal nerve by an inflammatory condition of the enlarged lymphatic glands.

The points of interest in this case lie: 1st. In the slight progress which the laryngeal condition had made during a period of six months. 2ndly. The explanation of the deficient movement of the right vocal cord

through pressure upon the recurrent laryngeal nerve by inflammatory products.

The autopsy was performed by Dr. A. G. Nicholls, who makes the following report:—

The body was that of a large-framed man very much cyanosed. In the neck, in the median line, was the wound of a recent low tracheotomy operation. The left vocal cord was seen to be bulged inwards and upwards, the left fossa being obliterated. Any passage of air through the glottis was impossible. The epithelioma over the left true vocal cord was intact but at the left processus vocalis was a small round ulcer through which a piece of necrosed bone protruded. A probe could be passed through the opening forward along the cord for a distance of 1 c.m. There was no evidence that the growth had extended outside the laryngeal chamber. Five c.m. below the true cords was the tracheotomy opening which was 2.5 by 3 c.m. in extent with ragged edges. It was surrounded by considerable pseudo-membrane and the trachea was intensely inflamed. There was also well-marked bronchitis. Along the course of the left recurrent laryngeal nerve was a small chain of enlarged glands.

Microscopically the growth proved to be a soft carcinoma of glandular type, apparently starting from the deep mucous glands. The lungs were almost completely collapsed: in the liver were four or five secondary carcinoma nodules, and the heart showed moderate fatty degeneration.

