DIRECT LARYNGO-TRACHEO-BRONCOSCOPY, AND ESOPHAGOSCOPY; REPORT OF CASES.

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It is without question that direct laryngo-tracheo-bronchoscopy is daily broadening its scope of usefulness; it is only a matter of time when this method will receive the credit it so richly deserves, and partly revolutionize the present status of treating these special organs. For an ordinary laryngoscopic examination the indirect or mirror method answers well, but when a thorough examination is desired of a pathological condition existing within the air tubes, the direct method, is the method of choice. With the tubes we have a direct view, and not an inverted image as with the mirror; we have the patient under better control, and it matters little how skilled we are with the mirror, we never have that certainty of precision and exactness that we have to such a nicety with the tubes.

To make a direct laryngeal examination seldom requires a general anesthetic except in children or nervous and hysterical individuals. With a curved applicator the pharyngeal wall is brushed with cotton dipped in a 20 per cent solution of freshly prepared cocain. After a moment's pause, the laryngoscope is introduced, and the base of the tongue and the epiglottis are brought into view. This is cocainized as well as the sub-glottic space. Allowing a few minutes to intervene, the laryngoscope is removed. On its reinsertion, the base of the tongue and the epiglottis are pushed forward; this brings into view the internal structure of the larynx, and a complete and satisfactory view can be obtained after its thorough cocainization. It is rather a good custom to give the patient $\frac{1}{4}$ grain of morphia and $\frac{1}{150}$ grain of atropia hypodermically 30 minutes before the examination.

Case 1. Woman, aged 28, entered the Presbyterian Hospital complaining of hoarseness and loss of voice. The laryngeal mirror revealed singers nodes. The first operation was by means of the indirect method; did not succeed in removing them entirely, owing to the location of one under the left cord posteriorly. By the direct method this was satisfactorily removed.

When examining the trachea, the tracheoscope is inserted through the laryngoscope, and the latter removed. As the tracheoscope is cautiously pushed down, we cocainize; it is rather surprising to note how little of the cocaine solution is used.

Case 2. Girl, aged 18, complained of a raw spot in the throat. By asking her to locate the spot, she would place her finger about 2 inches below the thyroid cartilage. On tracheoscopic examination a small ulcer was seen and the trachea inflamed. When the ulcer was touched, she immediately said, "that is the spot." A few applications of a 5 per cent solution of nitrate of silver gave her great comfort. Incidentally she remarked, "I am tired taking cough-medicines, as I have almost consumed a barrel of it." The bronchoscope can very readily be introduced, when we have finished with the tracheoscope.

Case 3. A woman, aged 42, complained of constant coughing with no expectoration. On bronchoscopical examination no marked pathological condition was seen, except a slight red and edematous bronchus. A 2 per cent solution of nitrate of silver was used down to its division. Happily in her case the result was very good.

With esophagoscopy, we use the same methods; at times it is better to use the index finger as your guide in enabling the tube to pass by the pyriform sinus.

Case 4. Mrs. C., complained of having swallowed a false tooth. She said that she felt it every time she swallowed. Asked to locate it, she placed her finger about 2 inches below the thyroid cartilage. After cocainization of the passages, the esophagoscope was slowly introduced. No tooth was found, but the posterior surface of the esophagus was lacerated for about 3 inches. She was a rather hysterical woman, and after a week returned again complaining. On examination, nothing was found, and the laceration had entirely disappeared. An X-ray examination gave negative results.

Dr. R. H. Johnston has an ingenious method that he styles his "straight flexed position," in which after the laryngoscope is introduced, the head is gently flexed forward and to the lateral side; the chin coming very close to the chest. By this means, an extremely satisfactory view of the larynx can be obtained, and ideally situated for operation under a general anesthetic. By this method the tiring of the hand, and having the patient's head hanging over the table is avoided. Those who have used the laryngoscope un-

der a general anesthetic readily appreciate how difficult it is to hold the base of the tongue forward; those who have used this position, readily realize its advantages. Since writing the above, I was called to remove a screw that was lodged in the throat of a colored boy, 7 years of age. After a preliminary examination with the mirror, I advised chloroform anesthesia. The larynx and the base of the tongue was brushed with a 10 per cent solution of cocaine. When the laryngoscope was introduced, the screw could be seen at the extreme anterior end of the cords, the point of the screw facing. With a Jackson forceps, the point of the screw was caught and dislodged. After its removal it was found to be a screw eye. The first introduction of the tube was unsuccessful owing to the large amount of mucus and secretion. After the hypodermic injection of 1/150 of atropia, a better view of the larynx and trachea could be obtained.

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Miner's Nystagmus. T. H. BUTLER, *Brit. Med. Jour.*, March 5, 1910.

Butler points out that nystagmus is especially the disease of the collier; that other employees working under similar conditions are not subject to it. He therefore agrees with Reid and Nuel that it is caused by a disordered cerebation; a defect in the brain not of the eye-muscle. The long-continued rhythmic movements of the pick, which the miner makes in comparative darkness, produce it. A miner who has once suffered from nystagmus must never again return to underground work. Many patients recover completely in time.—Ed.