

Dr. JOBSON HORNE exhibited preparations demonstrating the formation of an abscess sac at the site of the saccus endolymphaticus.

Abstracts.

LARYNX AND TRACHEA.

Sebileau, Pierre.—*Tracheotomy in the Treatment of Subcricoid Papilloma of the Larynx.* "Annales des Maladies de l'Oreille, du Larynx, du Nez, etc.," No. 4, April, 1902.

The author recommends the Trendelenburg position, by means of which a preliminary tracheotomy and the use of the tampon cannula is rendered unnecessary, and blood is prevented from entering the bronchi.

He also advises the passing of a silk suture on both sides of the second tracheal ring before opening the trachea; this enables the trachea to be raised, and after the incision has been made, permits the edges to be stretched apart, giving air and free room to operate.

The application of cocaine (10 per cent. solution) to the field of operation, and the non-use of the tampon cannula, lessen the chance of a reflex cough.

Anthony McCall.

Turner, A. L.—*The Submucous Areolar Tissue of the Larynx and its Significance in the Spread of Œdema.* "Edinburgh Med. Journal," May, 1902.

As an introduction to the anatomical part of this paper three cases of acute laryngeal œdema are reported. The first was a man who had apparently enjoyed fairly good health up to the beginning of the year 1899. He then began to suffer from slight hoarseness, but was able to go on with his work as a stonemason without inconvenience. On Saturday, September 2, he came into Edinburgh with the object of having his throat examined in the Royal Infirmary. He then was in fairly good health and spirits, complaining of nothing but hoarseness. On Sunday night he had occasional attacks of difficulty in breathing. On Monday morning a sudden severe attack of dyspnœa caused death before surgical aid could be obtained. The post-mortem examination revealed evidence of tuberculous disease of the lungs. The larynx was so occluded by an œdematous swelling of both aryepiglottic folds and of the mucous membrane over the arytenoids that a fine probe could scarcely be passed into the larynx. The œdema spread down the posterior surface of the arytenoids to the upper margin of the cricoid cartilage. The aryepiglottic folds lay together in the middle line, and were swollen outwards into the pyriform sinuses. On opening the larynx tuberculous ulcers, etc., were found on the vocal cords, left ventricular band, and left aryepiglottic fold.

In the forty-one cases of acute œdema of the larynx reported in the Journals between 1887 and 1897, and tabulated by Rice of New York, only one was described as being tuberculous, and in it the œdema was reported to have been brought on by potassium iodide, and in fourteen additional cases which Turner has been able to collect not one was described as tuberculous.

The second case was one in which the patient complained of considerable pain in the throat, aggravated on swallowing, and of a sensation of a foreign body being in the throat. The œdema was confined to the anterior surface of the epiglottis, and disappeared in a few days after it had been scarified.

The third case was a man, aged twenty-two, who complained of sore throat with pain on swallowing, on the morning of January 31. He was out in very cold weather all day, and at night had slight difficulty in breathing. He remained in bed on February 1. At night severe dyspnoea supervened. When seen on the following morning he was found speechless, perspiring, and in great distress, with noisy, stridulous inspiration; pulse full and bounding; temperature 100° F. The epiglottis and aryepiglottic folds were seen to be enormously swollen, and partially occluding the entrance to the larynx. The epiglottis and aryepiglottic folds were scarified with scissors, a poultice applied to the neck, steam spray, etc., used, and in a few hours much relief was obtained.

Turner's method of studying the distribution of the areolar tissue of the larynx was as follows. Carmine gelatine, well heated so as to be quite fluid, was injected with a fine syringe into the submucous tissue of fresh larynges at various points. (The larynges should be previously warmed in hot water.) The preparations were then fixed in Jore's formalin solution for twenty-four hours, then immersed in methylated spirits five or six hours, and finally placed in a mixture of glycerine and water. The carmine gelatine readily permeates any region of loose areolar tissue, and sets on cooling. The specimen can then be examined at any time, sections made, etc.

Fluid injected into one glosso-epiglottic fossa under low pressure fills up the fossa and spreads up the corresponding half of the anterior surface of the epiglottis. The swelling thus produced is limited by epiglottis behind, base of tongue in front, and the median and lateral glosso-epiglottic folds. On increasing the pressure, the resistance offered by the median and lateral glosso-epiglottic folds is overcome, and the fluid spreads into the opposite fossa and outwards to the pharyngo-epiglottic fold. The resistance offered by the latter can only be overcome by greatly increasing the pressure. When it is overcome the fluid enters the loose areolar tissue of the corresponding pyriform sinus, and can reach the aryepiglottic fold. No amount of pressure can force the fluid over the edge of the epiglottis.

The aryepiglottic folds are very easily injected, and under comparatively moderate pressure swell up so as almost to meet in the middle-line and to fill the pyriform sinuses. Moreover, although limited on the laryngeal aspect by the cartilage of Wrisberg, they are only loosely bound down on the pharyngeal aspect of the cartilage of Wrisberg and the arytenoids. Thus, the injected fluid readily passes over the back of the arytenoid cartilage and down as far as the cricoid. Under greater pressure, fluid may be forced on the posterior surface of the arytenoids from one side to the other; but fluid cannot be forced from the œsophageal to the laryngeal surface of the arytenoids or interarytenoid fold. Fluid can also be forced under very high pressure from the aryepiglottic folds past the pharyngo-epiglottic ligament into the corresponding vallecula. The laryngeal surface of the epiglottis cannot be injected, but the laryngeal surface of the posterior wall of the larynx can be injected to a limited extent. Injections in front of the epiglottis cause that structure to become

flatter, therefore broader, whilst injections into the aryepiglottic folds increase its backward curvature, producing the infantile type of epiglottitis.

The ventricular bands cannot be so easily injected as the aryepiglottic folds, but they can be injected to some extent; they swell towards the lumen of the larynx, also into the roof and the upper lip of the ventricles of Morgagni.

Fluid injected into the upper surface of the true cords, just in front of the vocal processes, readily spreads forwards; under greater pressure it spreads outwards into the floor and outer wall of the ventricles; whilst under still greater pressure it filters through the whole thickness of the cord, finally producing subglottic as well as glottic swelling. In the same way, fluid injected into the under-surface of the vocal cord produces first subglottic swelling, but under increased pressure permeates the whole thickness of the cord. It does not tend to spread down into the trachea.

The results obtained by Turner practically agree with those of Hajek. The paper is illustrated with several clear plates.

Arthur J. Hutchison.

E A R.

Caboche, H.—*Cerebral Hernia following Operations in the Middle Ear.*
"Annales des Maladies de l'Oreille, du Larynx, etc.," No. 4,
April, 1902.

Precautions to be observed :

1. Cleanliness, careful daily washing.
2. Suture of dura mater when this has been opened.
3. A large opening, to prevent retention of pus, which is an important cause of cerebral prolapsus.

Luc recommends a crucial incision in the cerebral substance with the galvano-cautery. MacEwen believes this procedure is wrong; he considers it would soften the nervous tissue and so tend to produce hernia.

Treatment.—Nitrate of silver, collodion, absolute alcohol, perchloride of iron, and caustic potash; igni-puncture, forcible compression, elastic ligature, a plastic operation and removal of tumour. These have all been tried, but usually the condition cures itself, if assisted by moderate compression and cleanliness.

Anthony McCall.

Coussieu, Henry.—*Researches on the Bacteriology of Middle-Ear Disease.*
"Annales des Maladies de l'Oreille, du Larynx, etc.," No. 5, May,
1902.

Dr. Coussieu emphasizes the importance of having the external auditory meatus quite aseptic before perforating the membrane. For this purpose he recommends a bath of equal parts alcohol and ether, to be applied for about ten minutes, then a warm antiseptic wash, followed by one of sterilized water, to remove all trace of the antiseptic, after which the passage is to be thoroughly dried with sterilized cotton-wool. No local anæsthetic is used.

The patient is placed in a recumbent position, the pain of the incision as well as the possibility of syncope being thus lessened.