

efforts at resuscitation were employed for 30 minutes without success, although air entered the chest freely.

Post mortem examination: the usual signs of asphyxia were present,—lungs dark and full of blood, becoming red after exposure to the air; small dark portions of collapsed lung appeared all over the surface, especially at the base of the right lung. Both chambers of the heart were empty. Wall of the right ventricle very thin. No clots were present. Liver, spleen and kidneys congested.

Larynx. Large papillomatous growths are seen especially on the right side in the position of the vocal cords, completely covering them. Papillomata are present also in the right ventricular band, the interarytenoid fold and in the infraglottic portion of the larynx. The growths are larger and more numerous than appeared the case on laryngeal examination.

Remarks. Papillomata are the commonest (39 per cent.) of the benign growths occurring in the larynx and are found frequently in children. They spring usually from the vocal cords, especially the anterior parts and the anterior commissure, but also from the ventricular bands, the ary-epiglottic folds, rarely from the epiglottis and interarytenoid folds. As to their cause, they may occur congenitally or as the result of irritation. In the case under consideration the growths apparently were not congenital, for there were no voice symptoms until $4\frac{1}{2}$ years and then after measles. It is possible, though, that they may have been present from birth but not in a position to cause symptoms, and that the attacks of croup which he had in infancy were a result of the papillomata. There seems to be no doubt that as the result of the diphtheria and the subsequent laryngitis, the growths increased in size and number, evidenced both by local examination and by the signs of stenosis present, especially in the latter attack. The treatment in children is unsatisfactory, not only from the difficulty of operating intra-laryngeally but also from the tendency to recurrence. If there is no respiratory difficulty, operation may be deferred until the child becomes older and gains therefore more self-control, when intra-laryngeal methods may be tried, or currettement under general anaesthesia, repeated if necessary, often is successful in eradicating them. But if there is dyspnoea, tracheotomy should be done, and at the same time the removal of the growths by a thyrotomy or sub-hyoid pharyngotomy, or else the removal deferred to a later date and intra-laryngeal methods used. G. H. Mackenzie, of Edinburgh, recommends tracheotomy alone and cites cases to show that under the functional rest gained thereby, the papillomata shrink and fall off without any tendency to recur. Intubation has been recommended to relieve dyspnoea and by pressure of the tube to promote absorption.

In this case tracheotomy was always kept in view, but was not done owing to the improvement following intubation and its continuance after removal of the tube. It is to be regretted that it was not done in spite of the apparently good condition of the child, then all danger from the nocturnal laryngeal spasm would have been removed, but this is another illustration of wisdom gained after the event.