

phyxia—patient cyanotic; this continued till morning.

16th. Dyspnoea continuous and increasing, with frequent exacerbations—patient cyanotic. At midday Dr. Wagner called me in consultation, with a view to operative procedure.

Child lies in semi-stupor from which she is aroused only by spasms of extreme dyspnoea, in which she becomes almost asphyxiated—quite cyanotic; breathing labored, with continued stridor; respiratory act imperfect.

Death seemed certain before very long unless the dyspnoea were relieved. We discussed tracheotomy and intubation, and decided upon the latter.

Dr. Sweetnam was called in counsel and agreed with our diagnosis, prognosis, and treatment. We all thought it a case that promised a favorable issue either from tracheotomy or intubation.

At 2 p.m. we introduced the O'Dwyer tube into the larynx.

Considerable irritation and cough were excited during the first half-hour, with expulsion of a good deal of mucus, some pus and exudate. When the larynx began to tolerate the presence of the tube, the dyspnoea was entirely relieved. Respiration, 24 per minute, perfectly free and easy; pulse, 130, more frequent than before—attributed to the excitement of introducing the tube. Expression, that of quiet comfort.

Auscultation gave us now over both lungs respiratory murmur, vesicular, full, free, distinct, low-pitched—no crepitation, no rales. We left the patient with her mother, feeling that the result so far was most satisfactory. 6 p.m.: child looks and feels well; respiration full, free, easy, but 28 per minute, and pulse 140. Gave a little milk which was easily swallowed, but followed by cough, sometimes very severe.

17th. Dr. Wagner found at 9 a.m. the condition the same as previous evening; at 2 p.m. the pulse and respiration steady and rapidly increasing in frequency, but respiration not labored—delirium.

At 5 p.m. I visited patient with Dr. Wagner. Above symptoms all intensified. Crepitation, both coarse and fine, over whole of both lungs; no respiratory murmur posteriorly; faint an-

teriorly. 7 p.m., patient died 28 hours after intubation.

*Post-mortem.*—At 9 o'clock, two hours after death, we gained permission to *remove the tube* by incision through the trachea. The tube was *in situ*, but on raising the trachea it slipped up into the mouth, showing it was not unduly tight; and when the trachea was opened it could not be drawn down through the glottis without tilting up the lower end, showing how impossible it was for it to slip down into the trachea.

Trachea and larynx opened.

Entire supra-glottic portion of larynx covered with exudate.

Below the glottis, so far as the tube reached, the mucous membrane was much inflamed, but no exudate; but below the point reached by the lower end of the tube, the mucous membrane was covered with a complete cast of exudation membrane, this cast commencing abruptly at the lower end of the tube; there was no ulceration recognizable, no abrasion, no part of the mucous membrane seemed unfavorably affected by the tube.

Briefly, a few points may be noted and conclusions drawn.

Respiration is suspended entirely during the effort at introduction of the tube, and in an amazingly short time your patient is livid—*asphyxiated*.

I have seen it stated somewhere that "the attempt at introduction should be short, that frequent attempts do no harm." With the first part of the statement I agree, but with the last I entirely dissent. Let your first attempt be short, but be sure it is successful, for every time you asphyxiate your patient by an unsuccessful attempt at introducing the tube you engorge the lungs—perhaps already overloaded with half-oxygenized blood—and contribute thereby to the excitement of inflammation in those organs already predisposed in diphtheria to this morbid process. In the interest of your patient *be short, but be sure*.

In this case the pulse rate was increased after operation from 15 to 20 beats per minute. This we at first thought due to the excitement consequent upon the operation, and hoped that rest and quiet for a couple of hours would re-