

## Original Communications.

*True Membranous Croup.—Tracheotomy—Fatal issue.* By RICHARD A. KENNEDY, A.M. M.D. Professor of Anatomy, University of Bishop's College. (Read before the Medico-Chirurgical Society of Montreal, May 22, 1874.)

The following case is reported chiefly from memory, as but few notes were kept. I had not expected that I should read the case, and therefore took no pains to have a full report. I was sent for during the night of the 25th of February last, to see a child, aged four years, suffering from croup.

The previous history showed that the boy had been subject for some days to a cough, which, however, had not been croupy. This night he was suddenly awakened by the cough of croup, which was so prolonged, and of so alarming a nature, that the parents sent immediately for me. On my arrival, the spasm had left him, and the child was quiet, but the breathing was somewhat dry and wheezing. My diagnosis was catarrhal croup.

An emetic of ipecac. and antimony was given, which gave great relief, and afterwards the syr. scillæ co., as an expectorant, with directions to use as an emetic if required. The throat was also well rubbed with a liniment of ammonia and goose oil, and a warm foot bath given.

I saw the child the following day, February 26th. He was almost as well as usual; there had been no return of spasm, but the cough was still hoarse and brassy. At 9 p.m., the same day, was again sent for. Found him very restless, breathing with difficulty and frequent return of cough, which was not so hoarse in character as before, but accompanied with spasmodic efforts to breathe. The dyspnoea was becoming very great, and his whole appearance indicated that the blood was becoming poisoned. Having now no doubt that it was membranous croup, I gave alum emetics frequently, and applied hot fomentations to the throat diligently. The emetics did not produce any beneficial results, nothing but the contents of the stomach were ejected.

I remained with the child during the night. The symptoms increased in severity, and he suffered terribly from dyspnoea. The *alæ nasi* were dilated; breathing was abdominal and very little air entered

the chest during the inspiration; lips and fingers became livid, and the child's struggle for breath was intense.

Considering that death was inevitable in a few hours unless relief could be given by an operation; I advised the parents to allow me to perform tracheotomy, and after some demur gained their consent. The operation was performed at 5 a.m., Feb. 27th, by candle light, Dr. Trenholme assisting me. Chloroform was administered. The incision was made higher up than usual, owing to the extremely large size of the anterior jugular veins, which latter were distended to the size of the little finger, and, as we were afraid that the hæmorrhage would be excessive, I cut immediately above the junction of the veins, so that the amount of blood lost was inconsiderable. The trachea was entered without trouble, being held stationary by a hook, which latter, however, did its office very imperfectly. Some time was lost in inserting the tube, and just as insertion was accomplished, breathing had ceased and life, to all appearance, seemed to be extinct. Artificial inspiration was resorted to, and, after a few moments, we had the satisfaction of seeing respiration return, and the boy breathe easily through the tube. The tube was a double one of silver.

Two hours after the operation, he was lying quiet, but little blood came from the wound, and, excepting occasional efforts to cough, he was quite comfortable. I prescribed aconite, ipecac. and quinine, and a demulcent diet, and as much moisture as possible to be inhaled. I saw him frequently during the day, and was obliged each time to remove the tube and clean it. Toward the latter part of the day I obtained a larger inner tube, which was inserted with benefit.

Feb. 28th.—Respiration slightly hurried, child otherwise comfortable and sitting up, playing with toys. Tube fills up frequently with tenacious mucus which is occasionally coughed up through the tube. During the day a piece of what appeared to be false membrane was drawn out by the father, and I had hopes that the operation would be successful. I obtained a small spray producer, and from time to time directed it against the tube, and by this means was enabled to prevent the tube from filling up, as the sputa could without difficulty be forced out. Occasionally, during coughing, frothy mucus would be expelled from the mouth. There was some fever, and the pulse was 96. A large quantity of fluid was drank during the day, principally of milk.