ACCOUNT
OF A
CASE
OF
C R O U P,
IN WHICH THE
OPERATION OF BRONCHOTOMY
WAS SUCCESSFULLY PERFORMED.

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MASTER B., aged seven years, had been much disordered in his stomach and bowels, and had a slight degree of fever. This, however, had so far subsided, that his parents intended to return to their home in the country. Mr. Lightfoot, who had attended him, called in the morning of April 25, 1814, and was told that the child had a little cold and cough; he recommended that if the complaint should increase, leeches should be applied to the chest, and then a blister. In the even-

ing his assistant informed him, that leeches and a blister had been sent for. Mr. L. was desired to call again on the following morning, when he found the breathing distinctly manifesting that croup had taken place. He instantly bled him largely from the jugular vein, and as soon as he recovered from the fainting which this produced, directed an emetic, which operated freely, and occasioned him to bring up a portion of a membranous substance, which appeared evidently to Mr. L. and Dr. Meriman, who was now called in, to resemble that found in the trachea of those who die of this disease. A purgative was given, and calomel was ordered to be taken every six hours.

On the afternoon of Wednesday the 27th, the difficulty of breathing greatly increased, the countenance grew livid, cold sweats came on, and he appeared sinking. He was, nevertheless, perfectly sensible. No chance of his recovery now seemed to remain, unless it were by opening the trachea, and I was applied to for this purpose. I exposed the trachea just below the cricoid cartilage, and divided two of the cartilaginous rings vertically, cutting afterwards transversely in the interstice between them. About an ounce or an ounce and a half of a reddish brown and frothy mucus gushed out through the opening, and by a tolerably full inspiration which presently followed, the child was enabled to cough up more of the same kind. The breathing became immediately relieved, the cold

sweat ceased, and the countenance in a short time resumed much of its natural appearance. The pulse was 160. On the morning of the 28th the breathing was much improved: pulse 144. He was directed to take half a drachm of Oxy-mel of Squill every hour in a little Camphor mixture; and four ounces of the Camphor mixture were to be employed as an enema, several times in the course of the day. In the evening his breathing had become quite easy, and the cough much less sonorous. On the 29th, he brought up with a slight cough about a dessert spoonful of tough mucus, but it did not appear that any had passed through the wound. He was better in all respects, and from this time his recovery was gradual and uniform, so that on the 13th of May he was sufficiently well to return to his home in the country.

Since this case occurred, I have had an opportunity of witnessing that of a child about five years old, in which the same operation was performed by my friend Mr. Blair. In this instance the first symptoms of disease were fever with an erysipelatous state of the tonsils, from whence inflammation extended into the trachea, producing impeded respiration. Suffocation was rapidly advancing, and the operation was deemed the only resource. The trachea was opened longitudinally, and more than an ounce of red and frothy mucus issued through the wound; this was followed by a pretty full inspiration, and a subsequent cough, in which

much more of the same sort of mucus was brought up. The bronchiæ then appeared to be entirely cleared: for the breathing became free and easy, and the child was for a short time greatly relieved; but the debility which had been previously induced by the disease was too great to be surmounted, and occasioned death the same afternoon.

In such cases of Croup as I have examined after death, I have found the trachea choked up with this mucus, and I am very much inclined to suspect that it is by it more than by the coagulable lymph, that suffocation is finally produced. When the quantity of mucus is such as to prevent the air from getting into the branches of the bronchiæ, and from thence to the air-cells, the patient becomes unable to clear the tube by coughing, the properties of the blood must rapidly degenerate, and death will speedily ensue. But I doubt whether this is so often to be ascribed to such an accumulation of the coagulable lymph itself, as absolutely precludes the transmission of air. If this suspicion be just, the use of bronchotomy must result chiefly from its emptying the trachea of mucus, and thus enabling the patient so to cough, as to clear the branches of the bronchiæ, without which the air, even if it pass through the obstructed larynx, cannot reach the lungs.

It would also follow, that the introduction of a canula, or tube, into the trachea after the opera-

tion, for the sake of securing the passage of air, is of less consequence than has been usually supposed, and might even be better omitted, as the presence of an extraneous body must irritate the internal membrane, and would thus be likely to increase that secretion of mucus, from an accumulation of which the principal danger is to be apprehended. See Mr. Andree's case in the 3rd Vol. of this Society's Transactions, pages 336 and 337. In the instance which I have related, I found no necessity for a tube, though I am sure little or no air entered through the wound.