

fever and profuse sweating. It had been considered acute tuberculosis, and the pus was thought to come from a cavity in the lung. It is probable that the rupture into the bronchial tubes occurred near the upper part of the lung, and that the pus cavity had been unable to empty itself, for on introducing a large drainage tube in the eighth intercostal space below the angle of the scapula, a large quantity of thick putrid pus came away, and from this time improvement was uninterrupted and recovery was complete in three months. She has borne two children since and is now in perfect health.

Cases XVII, XX and XXI are instructive, as showing how quickly children generally get well after paracentesis, even when the disease has lasted many weeks. In none of them was the cavity washed out, nor did the pus become offensive, although air entered freely.

Case XXII is the only one I have met with in which pus collected after the aspiration of serum. He was taken sick on the 15th, aspirated on the 25th of the same month and two quarts of serum drawn off. On April 15th three pints of pus were removed by aspirator, and on May 7th a drainage tube was put in. This was in 1885, and it has been discharging ever since. I first saw him on the 2nd of September 1885, and again several months afterwards, but he refused to submit to resection of the ribs and continues to put up with the unclosed cavity.

It is impossible to over-estimate the importance of strict antiseptics in the performance of aspiration of the serous effusion from pleurisy. The instrument should be not only clean and aseptic, but the skin where the puncture is made should be well washed with sublimate solution.

In adults, all will agree that free drainage should be secured until the cavity is closed, the only question being the manner of doing this. Without reviewing the relative merits of free incision, resection of one or more ribs, or a double opening, I would only say that in practice I have generally made a single opening with a large trocar, and have introduced a drainage tube through the canula, which is then withdrawn, leaving the rubber tube in the wound and securing it there by a thread passed transversely through it, and kept in close contact with the skin by strips of adhesive plaster. I have not seen a case where I thought a double

opening was necessary, or would have given a better result, and unless a clear indication for making it be present, I think it better and safer to make only one. The admission of air into the cavity may have disadvantages, although I am not convinced that it has. On the other hand, its presence there prevents the too rapid expansion of the lung, and the injury that might result from the sudden rupture of adhesions.

Should the suppurating cavity be washed out? This is a question of some importance, and the answer must depend upon the circumstances in individual cases. There is undoubtedly some risk in washing out, for cases of sudden death, the result of injecting fluid into the cavity, have been reported. The fatal result does not depend upon the kind of fluid used, for the use of pure water has caused death. The explanation of this is not easy, but it may be that the untoward event is due to inhibition of the heart through reflex action, caused by the presence of the suddenly injected fluid. When the pus is healthy washing out is unnecessary, and if the patient's condition be good, as indicated by the temperature, pulse, etc., even though the pus be not healthy, I believe it advisable not to irrigate. If, however, free drainage be maintained without amelioration of symptoms, and the pus be offensive, I believe the use of a disinfectant wash necessary; and if it be of the temperature of the body and injected very slowly the risk will be very slight. The quantity injected will vary with the size of the cavity.

Aspiration will sometimes cure empyema in children, but in consideration of its frequent failure and the risk that such delay implies, it is doubtful if it would not be better practice in most cases to perform paracentesis instead, especially as anaesthesia is required for either. I believe it would. Dr. Wilks has reported five deaths in children, occurring in one of the London hospitals during a single year, from bursting of pus into the lung, and he advises tapping and free drainage if one aspiration fail.

CLINIC, BY JOSEPH E. WINTERS, M.D.*

Professor of Diseases of Children at the Medical Department of the University of New York and Post Graduate School, etc.

GENTLEMEN,—I present to you first this morning a child twelve years old with swelling on the left side of the neck. She is one of five children;

* Delivered at the Medical Department of University of New York on Nov. 1st. 1888.