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PARACENTESIS THORACIS.

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Having performed paracentesis 150 times on 75 persons, during the past twelve years, besides being witness of ten other cases, I now give the Society a brief *resumé* of my experience.

I have never seen the least permanent evil ensue from any of these operations, and but slight temporary difficulty, as pain, dyspnœa, stricture, cough, &c. This, I think, sufficiently proves the innocuousness of the operation, by means of the exploring trocar and suction pump, as suggested by Dr. Wyman, of Cambridge, Mass.

Frequency of the Operation.—I was once compelled to tap a patient, himself a physician, eight times in six weeks, to relieve his intense distress in breathing; and to operate on a lady nine times during eight and a-half months, the first being to save her from death from orthopnœa, and was performed when she was over four months pregnant. I have also punctured one chest twice in the same day, in order to reach all the fluid which was divided by false membranes.

Number of Recoveries.—Out of the whole 75 patients, 29 recovered completely, and apparently in consequence of the operation, which was generally performed after severe symptoms had manifested themselves, and when I was called in consultation. In all these cases the tapping seemed to be the first step towards recovery.

The Fluid.—Of the 75, the fluid obtained at the first operation was serum in 26, of which 21 made good recoveries. If afterwards the fluid become purulent, I have noticed an almost certain fatality to attend the change, of six of such cases, four have died, and the other two, when last seen, were failing.

Pus flowed at first in 24 cases; seven of these recovered and seven died. Relief is always obtained, but the tendency remains to a termination in fistulous openings, or phthisis.

A sanguinolent fluid at the first puncture, thin and of a dark red colour, not coagulating, I consider almost certainly fatal, and a consequence of some malignant disease of the lung or pleura. Of the seven of these cases, six died, and the other is still lingering.

But when the fluid becomes of this colour only at the second or any subsequent puncture, I deem it of comparatively little importance towards the prognosis.

A mixture of bloody purulent fluid at the first operation is usually fatal; of three occurring, all died.

A fetid gangrenous fluid is very rare; I have met with but one case, and although great and permanent relief was obtained from the orthopnœa, the patient sunk in a few days, when the pleura was found gangrenous.

Pneumo-hydrothorax.—Here paracentesis can do no harm, and may give great relief; I have operated once with much temporary benefit, and should not fail to do so again were the dyspnœa urgent.

No Fluid.—Finally, in seven cases I got no fluid whatever; this occurred most frequently in my earlier operations, and the failure was probably due to the cautious and slow manner in which I plunged the trocar between the ribs, carrying thus the false membrane of the pleura costalis before the instrument instead of piercing it; so that it really never entered the fluid. At other times I have little doubt that an error of diagnosis was made, and that instead of a fluid there was simply an unexpanded lung and thick false membranes on the pleura, causing as much dulness on percussion and absence of respiration as if a fluid were present. The diagnosis of the two was not as easy to me then as now, inspection is the test between these two conditions; the intercostals are distinct and depressed when a membrane exists, and indistinct and level with the ribs, or possibly prominent when a fluid occupies the chest.

Once an immense tumour filled and uniformly distended one pleural cavity, and in its course presented all the phenomena, natural and physical, of simple pleurisy. I tapped it three times, namely, at the back, side, and front, at the same visit. No evil, however, followed from it.

An enquiry has been made as to which side gives the most successful results. I regard an operation performed on the right side as much more favourable than one on the left, for about twice as many of the former have recovered than of the latter, and not over half as many of those of the right side have been among the doubtful cases.

Inspection of the chest should never be neglected, for when full of fluid there will be found a general roundness and immobility of the whole of the affected side. At times local swelling may develope itself, and this is especially apt to occur with the breast, which becomes unduly prominent. It is not often that bulging of the intercostal spaces takes place, for they are rarely more than on a level with the ribs, which frequently seem closer from contrast with those of the opposite side, that are so constantly on the stretch to fulfil their double duty. Where the effusion is great, vocal fremitus is wanting, and there is often exquisite sensitiveness to the touch over the whole of that side of the chest, which disappears after the removal of the fluid.

The lung, unless bound by adhesions, is gradually displaced, and floats upon the fluid beneath. Should doubts arise as to the presence of effusion, change of position with palpation, as in dropsy, will remove them. As the liquid increases, the lung farther compressed, is deprived of air and forced backwards towards its root, until respiration can no longer be detected but at its apex and close to the spine behind; and other organs become removed from their positions. Mr. M'Donnell states that