

incisions may be made above or below as required. The number of ribs to be removed will be determined by the dimensions of the cavity in the vertical direction. The surgeon need not hesitate to remove portions of three, four, five, or even six ribs. For obvious reasons the first and second, and the eleventh and twelfth are never interfered with. The periostium should first be divided longitudinally along the middle of the rib, and raised from the latter before removing it. The pleura should not be interfered with, except so far as necessary to enlarge the fistulous opening, or to make a new one in the most dependent position to secure proper drainage. There is usually very little hemorrhage. After the operation the cavity should be thoroughly irrigated so as to remove any blood which may have entered during the operation. The wound should be united, drained and dressing applied. In the after-treatment in addition to the constitutional remedies which may be indicated, such as quinine, iron, codliver oil, etc., the cavity should be regularly washed out with disinfectant solutions, and the healing process may be further facilitated by the occasional use of stimulating lotions containing tincture of iodine, sulphate of zinc, etc. A favorite plan in my own practice, is to add two or three drachms of tincture of iodine to the carbolic lotion to be used for washing out the cavity. When it is found the progress of the case comes to a stand-still, which may be determined by the repeated use of the probe or by frequent measurement of the quantity of fluid injected the operation may be repeated. Occasionally great assistance in closing the cavity may be derived by the application of an elastic bandage around the chest. In conclusion I would say that Estlander's operation may be regarded as a valuable procedure in the treatment of chronic empyema, and that useful lives may be saved by the operation.

ANGULAR CURVATURE OF THE SPINE OF OVER TWO YEARS' STANDING.— RECOVERY.*

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Mrs. B., æt. 33, a native of England, married, mother of one child, consulted me and gave me the following history.* Over two years ago she felt

pain and weakness in the back while washing. "Went to a medical man and told him my trouble, and drew his attention to a small lump on my back. He did not strip my body nor examine it, but told me I would never get better. Took medicine for two years from him and during this time the lump was becoming larger and the pain more severe. Had to lie in bed the greater part of the day and could do no work." Before coming to my office she had pains shooting down the legs and was harrassed by an irritative fever. On Sept. 2nd, 1883, she came to my office and appeared to be wretched enough. From her walk I suspected Potts' curvature at once. She had a pulse of 120, with a temperature of $101\frac{1}{2}^{\circ}$, with a careworn anxious countenance, indicative of pain. She told me that the shaking of the buggy gave her pain and that her husband had to make the horse walk the most of the way, a distance of 18 miles. Her tongue was furred and appetite gone, hence she felt pretty weak. Stripped the body and examined the spine particularly, and found displacement three inches in length and one in depth, involving the last dorsal and first and second lumbar vertebræ. I told her that the only hope of cure was in the application of Sayre's plaster of Paris jacket, or otherwise in lying still in bed day and night, and in supporting treatment, cod liver oil, hypophosphites, etc. She chose the jacket, and accordingly on the same day, with the assistance of Dr. Scott, of Seaforth, we put on Sayre's jacket, suspending her in the usual way. She said she felt complete relief from pain, and that she could jump off the doorstep of the house immediately. After the plaster hardened I put her upon syru of fer. iod. with cod liver oil and hypophosphites, advised good unstimulating nourishment and abundance of fresh air. The first jacket was kept on six weeks. She was free from pain until the jacket began to get loose, then pain returned again. Had the second jacket put on and felt relieved as before. Kept it on six weeks also; improving steadily. She took the medicine as before. During all this time she was able to ride around in a buggy, what she had not been able to do before, as every jar gave her pain. At the end of the six weeks we put on another jacket. She did not get the same relief from this one; whether it was our fault or not, could not say. She came back at the end of one week and had another put on, which proved more suc-

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