

this must be determined by the condition of the fluid. If the condition is due to some of the micro-organisms that are not particularly virulent, and if the adhesions of the lung are of recent formation and not too dense to prevent its expansion, and if the intercostal space is sufficiently wide to allow the insertion of the drainage tube without compression, the probabilities are that the simple incision between the ribs will suffice.

On the other hand, if the pleura is markedly thickened, and there are large masses of coagulated fibrin, and if the condition is due to the more active pyogenic organisms, the suppurative process will keep up for a longer time and the gradual retraction of the chest wall will so decrease the size of the opening that drainage will not be efficiently performed and consequently, in these cases, the resection of the rib is essential. Personally, I cannot see that the question is one that admits of much argument. The time required to resect a portion of a rib is so little more, and the consequent shock so slight and the drainage so much more efficient, that I favor this procedure in practically all cases. The better inspection of the pleural cavity that can be made through an opening after a rib is resected, and the determination of the exact condition of the lung and of the pleural cavity, demonstrating at once whether simple drainage will be sufficient to cure the case or whether some further manipulation is necessary, is sufficient to compensate for the slight extension of the operation.

I have used incision and drainage only 18 times. Of these cases six were cured, two improved, and eleven died. Simple resection of the rib has been performed 45 times, with 12 cured, 18 improved, and 15 died.

It must be perfectly obvious to any one who has studied this question, that the problem is not simply one of the evacuation of pus, but that we must go further and make sure of the obliteration of the suppurating cavity. If we accept this fact, it must also be obvious that in a certain number of instances a simple thoracotomy, or a thoracotomy with the resection of a rib, will not be sufficient to effect a cure. The rigid chest wall cannot fall in for any distance, and the lung bound down by adhesions will not sufficiently approximate the chest wall to allow of apposition of the pleural surfaces. Thus a permanent suppurating cavity is left with a persistent empyemic fistula. If the operation is done early, when the adhesions are slight, and when the expansion of the lung follows the evacuation of the fluid, one may reasonably expect a cure; but in my opinion this should be determined at the time of the operation. Many experienced operators have adopted the additional method of freeing the lung from its adhesions at the time of doing a thoracotomy, in