

13 sero-purulent, 7 purulent, reports the quantities removed as ranging from 200 to 1,000 gms. and in one case 1,500. The rapidity of the re-accumulation of the pus is also noteworthy. An important point in diagnosis is illustrated in this case, which I have not yet seen mentioned ; it is the advantage afforded by the phonendoscope in helping to distinguish pericardial effusion from dilatation and from pleural accumulations. In this case, and doubtless in all where the effusion does not force the heart too far from the chest (if it ever does so), one could with the phonendoscope readily make out the heart in the midst of the effusion, while the latter was outlined by percussion. In a recent case of large left hemorrhagic pleuritic effusion also, out of the uniform flatness of percussion one could clearly locate the heart, which was not pushed to the right, although 86 ounces were removed by aspiration, doubtless owing to the age of the patient and the rigidity of the attachments which retained the heart in its normal position. This is one advantage of the phonendoscope which is worthy of further investigation. I found in this case and in others that the phonendoscope is less to be relied upon than the stethoscope. Misleading sounds resembling crepitus or grazing are produced by the instrument itself when not in perfect contact with the surface, as over the ribs in one emaciated, and in a recent case of double pneumonia, tubular breathing was not revealed by the phonendoscope, although quite distinct with the stethoscope.

It is of surgical interest also in the case, which I believe is the rule, that one can rapidly remove the accumulation without any risk of heart failure symptoms. The avoidance of the internal mammary artery—which descends half an inch from the edge of the sternum—and the pleura are among the chief points for consideration in incision or tapping. The latter is considerably pushed aside by a large accumulation, and normally recedes towards the left from the upper border of the fifth costal cartilage. They are both avoided by selecting a point $1\frac{1}{2}$ to 2 inches to the left of the sternum. The general results have so far been fairly good for incision, and, doubtless if the diagnosis and operation are made earlier, the mortality in these cases will be much less than in the past.