

the pleural sac may be evolved by the healthy pus, and this is particularly the case where there is necrosis of the ribs.

[Speaking of an important element in diagnosis, the author proceeds:]

It still remains to be considered whether there are any means by which the character of the pleuritic effusion can be positively ascertained. The mere intensity of the symptoms is no evidence of puriform effusion, since this may result from a low grade of inflammation, whilst, on the other hand, the most severe forms of pleuritis frequently end in effusion of serum and lymph; nor is the long duration of the effusion any proof of its puriform character, inasmuch as it is well known that serum may remain in the pleural sac for many months without undergoing any important change. Hectic fever has always been considered as more or less characteristic of empyema, but occasionally this disease exists without any considerable constitutional irritation; so that, from the previous history and general symptoms alone, we could but arrive at a probable opinion; more positive indications, however, may be derived from simple inspection of the chest. In cases of empyema, the lower intercostal spaces are frequently bulging to a much greater extent than ever occurs in hydrothorax, whether mechanical or inflammatory; whilst, at the same time, the superficial veins are oftentimes distended and tortuous. These peculiarities are probably owing to the high specific gravity of the fluid distending the intercostal spaces, and at the same time pressing upon the deep-seated veins, thus obliging the venous blood to return to the heart by a circuitous route. Dr. Stokes believes that the intercostal bulging depends more upon imperfect innervation or paralysis of the muscles than upon the mere pressure of the pus; Dr. Roe is also of the opinion that a moderate amount of pus may by its irritating properties cause a relaxation or paralysis of the intercostal muscles, so as to give rise to a greater degree of distension than could be produced by the pressure of a much larger quantity of serum.

[In reference to the cases suitable for the operation of paracentesis, the author remarks:]

In uncomplicate cases, and where the amount of pus is so considerable as to cause much distress, we see no good reason why the operation should be delayed. The chief objection urged against the paracentesis is the alleged injurious effects resulting from the admission of air into the pleural sac; but it is now generally conceded that all apprehensions on this point have been, in a great measure, unfounded. In twenty-four cases reported by Dr. Roe, the admission of air produced no detriment, either by its pressure or decomposing influence, and numerous cases of a similar character might be collected from the different periodicals; this view is also in a measure confirmed by the well-known fact that