

The Oliver-Cardarelli symptom, the downward tug of larynx and trachea when the head is slightly thrown back, may be of assistance in the question of aneurysm. Lastly, in carcinoma the characteristic cells in the sputa may settle the otherwise impossible differential diagnosis.

(c) Form pleuritique. The pleuritic type. In this form the symptoms referable to the pleura predominate; severe pain in the chest and shoulders and persistent pleuritic effusion often more or less completely mask all symptoms of pulmonary disease. This type also corresponds to a later stage of the disease as far as tumors of the lung and bronchi are concerned. It is the usual and very early form in which primary malignant disease of the pleura presents itself, but which is beyond the scope of the present discussion. The diagnosis is not always easy, and can often be made only after continued observation. Hemorrhagic effusion occurs, as is well known, not only in malignant disease, but often enough in tuberculosis; it may, in very rare cases, even occur in entirely benign forms of pleurisy, as, for instance, in measles. It very frequently happens that the first few aspirations recover only clear yellow serum, sometimes in very large quantities, and that only by later punctures, hemorrhagic, oftentimes thick chocolate-colored fluid, is obtained; this may be taken as characteristic of tumor. I am not aware that it has been observed in any other form of disease. In nearly all cases the effusion is persistent, that is, the chest fills up again and again, and the aspirations have to be repeated at comparatively short intervals until the end. There are, however, rare exceptions. Unverricht⁹ reports the case of a woman in whom, after two aspirations of hemorrhagic fluid, all symptoms seemed to disappear; she felt entirely well for a time and gained in weight until secondary tumors appeared in the skin where the aspirating needle had penetrated. The autopsy showed primary bronchial carcinoma. Hampeln reports a similar case. Not much is to be expected from the bacteriological examination of the effusion. The cystological examination, on the other hand, often, though by no means always, gives valuable hints. Single epithelial cells do not possess any significance; the large, edematous and vacuolized cells described by Fraenkel are characteristic of endothelioma of the pleura and need not concern us here, but if conglomerations of a number of epithelial cells are found, and especially if these show a decided glycogen reaction, it goes far to corroborate the diagnosis of tumor. In the ordinary cases of non-malignant effusion there is usually more or less complete relief as soon as the fluid has been evacuated, but in the majority of cases of malignant pulmonary disease this relief does not follow and there is little