

are due to the same cause. In the case cited, as well as in another which I saw last spring, distinct pulsation occurred—they were, in fact, pulsating empyemata. Both were of the pneumonic form, and in both the fluid was found in greatest abundance in the upper part of the left chest.

These two forms of empyema will now be contrasted as to the character of the fluid. In the streptococcus variety the fluid may be slightly opaque, sero-purulent, or purulent. In large collections the upper portion may be serous, and the lower portion purulent.

In that due to the pneumococcus, the pus is uniformly thick, yellow, with a slightly greenish tinge, and is an excellent example of what the older writers called laudable pus. It does not readily separate into serum and pus. Its peculiar characteristics are great density, viscosity, and the greenish tinge.

In the streptococcus form, we have the ordinary signs and symptoms of sero-fibrinous pleurisy. The amount of effusion is usually large, and fills up the cavity, although it has occasionally been found localized. A striking peculiarity is the edema of its chest wall—a condition rarely found in the pneumonic form.

The evolution is slow. The virulence of the organism varies in different cases, depending largely upon individual peculiarities, and upon the disease to which the condition is often secondary. The duration is usually much longer than in the pneumonic form.

In the pneumococcus variety, the mode of onset is variable. In some cases, as in the one already given, there is a decided increase of the fever and dyspnea. It may, however, commence insidiously, so that a large quantity of fluid may be formed before it is discovered. Edema of the chest walls, which is so frequently found in the streptococcus form, is seldom seen in this variety. A striking peculiarity is the localization of the pus, often interlobar, often in the costo-diaphragmatic sinus, or in the upper part of the chest. The spontaneous evacuation of the pus through the bronchial tubes occurs very frequently in this form. It occurred in 20 per cent. of Gerhard's cases. In the majority of such cases, there is no direct opening between the pus cavity and the bronchus, so that a pneumothorax is not produced. This form, then, may terminate in various ways :

(1) By absorption.

(2) Pus voided either through the bronchi, or through the walls of the chest.

(3) Pus may remain encysted.

The duration is not so great as that of the first variety, as the life of the pneumococcus is limited.

I should like here to make a few remarks upon the diagnosis of the