

physical signs are due to the accompanying pleurisy with its distinctive features. The signs of pneumothorax may be present when rupture has taken place. Fluoroscopic examination may help to localize the focus, much depending upon the situation. Fever is a very variable element in both gangrene and abscess, depending upon the absorption of septic material. When the gangrenous nodule is sequestered and when the secretion can be freely emptied through the bronchi and no absorption, fever may be absent; as a rule it is of septic type ranging as high as 104 and accompanied by chills.

The Differential Diagnosis:—The affections which simulate both gangrene and abscess are: 1st. Bronchiectasis. In this case the sputum has some of the same characteristic features minus the elastic tissue and the absence of fever.

2nd. Putrid Bronchitis. Strümpell states that putrid bronchitis and gangrene often run into each other without any sharp boundary.

3rd. Rupture of an empyæma into the lung. The differential diagnosis between a ruptured empyæma will be the sudden expectoration of a large quantity of purulent sputum, possibly foetid, but not gangrenous.

4th. Putrefactive changes in the walls or contents of a tubercular cavity which can only be distinguished by the presence of the bacillus of tuberculosis.

The course of abscess and gangrene, when unsuccessfully treated, is that the patients pass into a marantic state and often die of exhaustion, septicæmia, the rupture of a blood vessel or broncho-pneumonia.

Treatment:—Guaiacol has been used successfully as a pulmonary antiseptic. Lop reports three recoveries by the subcutaneous use of guaiacol, and oil of almonds, sterilized at 100°, two grammes used one to four times daily.

Traube recommends the use of $\frac{1}{2}$ gram. of acetate of lead, every two hours. Osler considers the medical treatment very unsatisfactory, and recommends the inhalation of carbolic acid or guaiacol; he says the same of abscess. Undoubtedly, if one is able to define the focus, surgical treatment is the only satisfactory course to pursue.

Of the 11 cases of gangrene, the clinical reports shew that eight were males and three were females. They were all in the middle period of life, 25 to 56 years of age.

There was a history of inebriety in four, and two were epileptics. There was no evidence of diabetes in any.

Of these cases five died. One recovered without operation, four were operated upon with complete recovery, and one left the hospital unimproved. This shows a mortality of 45 per cent.