

faction, when, in addition, the resistance of the body is reduced by want, alcoholism or diabetes.

These saphrophytic bacteria cannot alone produce gangrene, but are usually associated with some other organisms generally a pyogenic coccus, streptococcus, staphylococcus and a virulent pneumococcus. Other observers have found in the secretion from gangrene, spirilla from the mouth, the bacillus of malignant œdema, and one resembling the bacillus coli communis. The leptothrix pulmonalis was once thought to be the cause of gangrene, but the idea is now discarded.

Two forms of pulmonary gangrene are recognized, the circumscribed and the diffuse. Laennec first accurately described pulmonary gangrene, and his classification still exists. He looked upon it as a rare disease, and thought it approached the nature of the idiopathic gangrenes, such as anthrax, malignant pustule and pestilential bubo. He classified abscess of the lung under pneumonia, and stated that no organic lesion was more uncommon than a real collection of pus in the substance of the lung. Gangrene is more common in the right lung, and in the lower lobe, and in the outer portion of the lung, rather than in the centre. In the cases studied I found this to be true, with the exception that the focus was more frequently in the upper lobe. In abscess of the lung it followed the usual distribution. Gangrene tends to form a cavity with ragged irregular walls. Surrounding the gangrenous focus is an area of intense congestion and the lung beyond is œdematous. The pulmonary pleura is usually coated with a layer of fibrin. In some cases profuse hæmorrhage may occur from the destruction of tissue and the laying open of vessels. In the series of cases I have collected there were two examples of this condition. This description applies to the diffuse form of gangrene which is less common than the circumscribed, but may follow the latter. In the circumscribed form the destruction of tissue is not so widespread, and the resulting cavities are more sharply defined. Coincident with both these forms is an intense bronchitis, due to the irritation caused by the ichorous decomposing material, which is the source of much of the sputum. Abscess of the lung, when solitary, may attain the size of a lobe. If evacuation of the contents has taken place during life, the walls may be gangrenous and the contents foetid. If the mass be small and the patient in good condition a fibroid protecting wall may form, which, from within outwards, consists of a layer of necrotic lung and inflammatory tissue, a layer of solidified lung infiltrated with leucocytes and young connective-tissue cells and œdematous lung tissue. (Coplin).