

part. Clinically, therefore, it is well to distinguish between abscesses occurring in inflamed tissue and those that develop in previously healthy tissue. As examples of the first variety we have those that occur in lobar pneumonia and acute desquamative pneumonia. Here the exudation of leucocytes at certain points, or in a single circumscribed area, are not confined to the alveoli, but also affects the inter-alveolar tissue, total softening and separation of the tissue may take place, and an abscess formed.

Other varieties of pulmonary empyæma develop in previously healthy lung tissue. In this class we have those resulting from infected thrombus, from the veins in the abdomen or lower extremities before carried into the lungs through circulation. Aspiration of foreign bodies or fluids not infrequently cause this lesion. Pus from the abdominal cavity may burrow upwards through the diaphragm into the lung, there causing an abscess. These are known as perforating abscesses, and arise from abscess of the liver, subphrenic abscess, disease of the appendix or pus formed from perforation of the stomach or intestines, or as the result of malignant disease. Empyæma of the pleural cavity may perforate into the lung and caries of a rib or spine, or suppuration of bronchial glands may cause an abscess that will seek drainage through the lung. Once the lung tissue is invaded by pus, or commences to break down, the fluid increases, the air cells are destroyed or compressed, leucocytes are thrown out in the surrounding lung tissue, there is proliferation of the cells in the inter-alveolar tissue, interstitial thickening fibrosis, forming after a little time a strong, firm abscess wall. Whether the fluid originates from a pneumonia or a pulmonary embolus with its infarct; or from pus burrowing into the lung, it must find some way of escape from the thorax, or cause the death of the patient. Nature here, as elsewhere, sometimes affords the all-important relief, but only imperfectly. Should the pus rupture into a bronchial tube, and the abscess small and favorably situated, the drainage may be sufficient to bring about a complete cure if the cavity can contract down on to the bronchial opening.

But just here comes in the difficulty. Frequently lung tissue gives way with surprising rapidity, and a large abscess