cavity will completely mask the condition. Fluoroscopic and X-ray examinations are most valuable aids in these cases, and will often show the location of the cavity when physical signs and other methods of examination fail. They may also show how deep or how far removed from the surface of the lung is the abscess. For instance, the physical signs may indicate that the abscess is at a certain level, but a fluoroscopic examination may show clearly that the cavity extends downwards and that its lower end is farther removed from the surface of the lung than the upper end. This knowledge may prove most valuable to the surgeon, showing him where to place his incision, to secure the best drainage of the cavity subsequently.

The diagnosis of bronchiectatic lesions by the fluoroscope is much more uncertain. As remarked by Pfeiffer (Zur Diagnose der Bronchiektasen im Rontgenbilde. Beitrage Zur. Klin. Chir. Band 50, 1906, pp. 279), the similarity of the symptoms of bronchiectasis when accompanied by fetid bronchitis to those of lung gangrene and abscess is very close and the difficulty in differentiating between the two is extremely great. In bronchiectasis the condition, of course, is generally more wide-spread and diffused over one or more lobes in one or both lungs.

The use of the exploring needle as a diagnostic measure is inadvisable, because of the danger that the two layers of the pleura are not adherent. The pleural cavity may then become infected and a septic empyema develop. There is also the danger from puncturing vessels and hemorrhage. I have known hemorrhage to be quite smart after the use of the exploring needle, although never fatal. Even if the pleural layers are adherent infection may pass into the over-lying tissues of the chest wall and give rise to a phlegmonous inflammation.

The interesting relationship of bronchiectasis to lung abscess is, however, not alone in the question of differential diagnosis. Bronchiectatic conditions have been known to develop in the neighborhood of a healed lung abscess as a result of shrinking of the scar tissues and dilatation of the adjacent bronchi. Such cases have been reported by Garrè l.c. Hölferich-Lichtenauer, Deutsche Zeitschrift f. Chir. Bd. 50, S. 389. Körte also reports a similar case upon which he had operated for acute abscess of the right lung. A month after the cavity was healed, the patient returned suffering from a recurrence of putrid expectoration. Seven months and a half after the first operation an incision was made through the scar and a system of dilated bronchi was found. He reports further three other cases of acute gangrene of the lung, where, in the region of