Accidental Alveolo-Bronchography Caused by Lung Abscess between the Esophagus and Trachea

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A 43-year-old man with primary lung cancer complained of fever and severe cough. A chest CT scan revealed a lung abscess in the right upper lobe which was formed by obstructive pneumonia succeeding the primary lung cancer (squamous cell carcinoma) of the right upper lobe. Since the patient’s symptoms, which were thought to be caused by aspiration, pneumonia were deteriorating, an esophagography was performed using urographin. As shown in Fig.1, urographin ingested through the esophagus pooled inside the cavity of the lung abscess through the fistula between the esophagus and lung abscess, and then was drawn inside the trachea through the fistula between the lung abscess and trachea, forming tracheobronchography as well as alveolo-bronchography in the right lower lobe. The tree-in-bud appearances and acinar shadows were clearly observable. Chest CT scan also demonstrated the fistula between the lung abscess and trachea as well as the fistula between the lung abscess and esophagus (Fig. 2). Although analogous cases have rarely been reported, this radiological picture is summarized as an esophagobronchial fistula with abscessing pneumonia as a complication of squamous cell lung cancer.