

Lung atelectasis due to purulent bronchial secretions mimicking tumour

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Key words

- Aspiration,
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FIGURE 1. Chest radiography shows consolidation/atelectasis of the right lower lung field and right-sided pleural effusion.

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A 45-years-old man, with a history of Motor Neuron Disease and chronic use of psychoactive medicine, was admitted in severe condition with high fever 39.5°C, bronchial secretion retention and hypoxemia. **Chest radiography** (Figure 1) showed right lower lung field consolidation/atelectasis, probably due to aspiration, and pleural effusion. **Laboratory tests** were remarkable for severe leucocytosis (White Blood Cell Count 34500 cells/mcL, Neutrophils 95%) and C-reactive protein 28 mg/dL 28 (n.v. <0.5 mg/dL). He was managed with supplemental oxygen, antibiotic schedule against anaerobic, gram positive and negative bacteria, parenteral nutrition, intravenous fluids, and physiotherapy. Due to further serious clinical deterioration a **Chest Computed Tomography** (Figure 2) was performed which showed a right hilum tumour-like shadow compressing the interlobular bronchus, consolidation/atelectasis of the right lower lobe and right-sided pleural effusion. The patient underwent **emergent bronchoscopy** (Figure 3) which revealed copious purulent secretions into the trachea (Fig. 3a), in the main carina and both stem bronchi (Fig. 3b), completely occluding the right stem bronchus (Fig. 3b, 3c) and the right peripheral bronchi (Fig. 3d). After aspirating 200 ml of purulent bronchial secretions (Figure 4) and repeated bronchial washes all the right bronchi were open without intraluminal abnormalities (Fig. 3e, 3f). **Chest radiography after bronchoscopy** (Figure 5) showed regression of the right lower lobe atelectasis, without changing of the right lower lung field consolidation and pleural fluid. Culture of the bronchial secretions was positive for *Candida Albicans*. The antibiotic schedule was modified in accordance to susceptibility testing. The patient presented significant improvement after the bronchoscopy but his condition was again deteriorated and he was finally died.

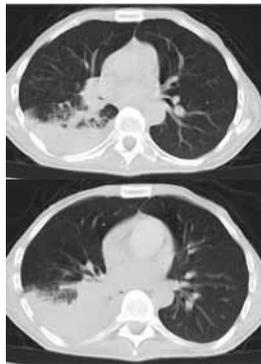


FIGURE 2. Chest Computerized Tomography shows a right hilum tumour-like shadow compressing the interlobular bronchus, consolidation/atelectasis of the right lower lobe and right-sided pleural effusion.

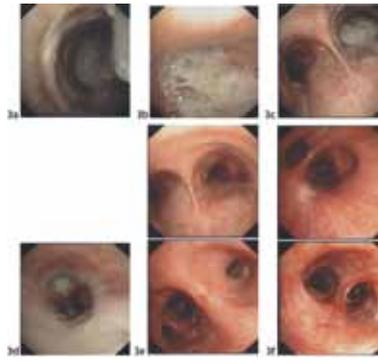


FIGURE 3. Emergent bronchoscopy revealed copious purulent secretions into the trachea (Fig. 3a), in the main carina and both stem bronchi (Fig. 3b), completely occluding the right stem bronchus (Fig. 3b, 3c) and the right peripheral bronchi (Fig. 3d). After aspirating 200 ml of purulent bronchial secretions (Figure 4) and repeated bronchial

washes all the right bronchi were open without intraluminal abnormalities (Fig. 3e, 3f).



FIGURE 4. Aspirated bronchial secretions.



FIGURE 5. Chest radiography after bronchoscopy showed regression of the right lower lobe atelectasis, without changing of the right lower lung field consolidation and pleural fluid.