A 73-year-old man visited our emergency room with complaints of poor appetite and unproductive cough for one week. On arrival, his temperature was 35.9°C, his pulse was 67 beats per minute, and his respiratory rate was 20 breaths per minute. The blood pressure was 80/50 mm Hg. The white cell count was 8850 per cubic millimeter. Chest examination revealed decreased breath sounds in the right upper lung field. The initial chest radiograph (Fig. 1A) showed opacification of the anterior segment of the right upper lobe. The focal downward bulge in the medial portion of the minor fissure and a concave appearance of the lateral aspect of the minor fissure were present, both of which result in a reverse S configuration known as the S sign of Golden. Computed tomography (CT)

Fig. 1 (A) A chest radiography shows opacification of the anterior segment of the right upper lobe (straight arrow). The focal downward bulge in the medial portion of the minor fissure and a concave appearance of the lateral aspect of the minor fissure are present, both of which result in a reverse S configuration (arrowheads) known as the S sign of Golden. (B) A contrast medium-enhanced computed tomography scan discloses a central obstruction mass (asterisk) and atelectasis of the anterior segment of the right upper lobe (straight arrow). The lack of air bronchograms within the opacified atelectatic right upper lung is consistent with obstructive atelectasis. The S sign of Golden is demonstrated (arrowheads)
scans demonstrated a central obstruction mass and atelectasis of the anterior segment of the right upper lobe (Fig. 1B). The right upper lobe bronchus was completely obstructed by tumor (Fig. 2). Squamous cell carcinoma was diagnosed by a bronchoscopic biopsy.

In this case, obstructive atelectasis just occurred and the right upper lobe was not completely collapsed. Therefore, opacification of the anterior segment of the right upper lobe led to an initial misdiagnosis of pneumonia. Right upper lobe atelectasis caused by large hilar tumors may be associated with a characteristic downward bulge in the medial portion of the minor fissure\(^1\). This feature, combined with the concave appearance of the lateral aspect of the minor fissure, results in a reverse S configuration of the minor fissure and is known as the S sign of Golden\(^1\). The “S sign of Golden” was first described by Golden in 1925 in association with bronchial carcinoma\(^2\). This sign is highly suggestive of pulmonary carcinoma as the cause of atelectasis\(^3\). On the posteroanterior chest radiograph, the proximal or medial portion of the minor fissure is convex inferiorly, and the distal or lateral portion of the fissure is concave inferiorly\(^3\). On CT, the medial margin of the atelectatic right upper lobe abuts the mediastinum and is associated with superior and medial displacement of the minor fissure\(^1\). With elevation of the minor fissure, the overinflated middle lobe shifts upward laterally alongside the atelectatic right upper lobe\(^1\). S sign of Golden should alert the physician in charge and lead to further investigations to confirm the first suspected diagnosis, which is lung cancer\(^4\). Differential diagnosis includes metastasis, primary mediastinal tumor, voluminous lymph nodes, and lymphoma\(^4\).

**References**