

Chest Wall Abscess due to Aspiration of Grass Inflorescence

The Editor

Sir,

Foreign body aspirations (FBAs) in childhood is frequent. Grass inflorescence aspiration is rare and may cause some serious complications (1–3). We present a case of grass inflorescence aspiration which caused a chest wall abscess (CWA) by migration into the chest wall.

A six year-old boy was referred with complaints of right chest wall mass and chest pain. Twenty days previously, he had been hospitalized due to complaints of fever, cough, chest pain and dyspnoea. Ten days later he developed swelling on the lateral chest wall (Fig. 1). Chest X-ray showed a bulging in the soft tissue on the right upper lateral chest wall and a foreign body. Chest ultrasonography confirmed a subcutaneous abscess without pleural effusion. Chest computed tomography demonstrated a chest wall abscess but no sign of foreign body. A thick, yellowish fluid was retrieved by puncture of the abscess (Fig. 2). The gram and Ziehl-Nielsen stainings and cultures of the fluid were all negative. On the third day of hospitalization, the abscess fistulized spontaneously through the skin and the tip of a foreign body appeared in the opening of the fistula. The tip was withdrawn with a forceps and it was a grass inflorescence (Fig. 3). He was discharged the day after on oral antibiotic therapy. At the six-month follow-up, he was quite well.

Grass inflorescence is an uncommon aspirated material. Because of its morphological and botanical characteristics, an aspirated grass inflorescence moves unidirectional. It is almost impossible to expectorate once aspirated.

Aspirated grass inflorescence either may remain local by penetrating into the airway, and then cause obstruction and pneumonia, or migrate to the periphery of the lung, and cause pneumonia, lung abscess, haemoptysis, bronchiectasis or empyema (1–3). Diagnosis of grass inflorescence aspiration in children is quite difficult (1). It is not detectable radiologically and has the tendency of migration. Meticulous anamnesis is crucial for diagnosis. Bronchoscopic evaluation is mandatory in suspected patients. In asymptomatic patients, diagnosis may be delayed and this can increase morbidity and mortality (1).

Chest wall abscess may occur anywhere on the chest wall and present as primary infections or may be due to secondary causes such as trauma or surgery (4). Foreign body aspiration as a cause of chest wall abscess is quite rare.

Migration of grass inflorescence into the chest wall may present as a chest wall mass and/or abscess which may be confused with *empyema necessitatis*, Tietze's syndrome, costochondritis, osteomyelitis and benign or malignant chest wall tumours (4).

Therefore, even if it is extremely rare, aspiration of grass inflorescence may cause chest wall abscess and physicians should be aware of this uncommon complication.

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