Subpleural Lipoma in Children

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A 14-year-old boy with syncope underwent a screening examination. There was no evidence of abnormalities on electrocardiography and echocardiography, but a round-shaped opacity with an incomplete border sign in the left lower lung field was incidentally found on the chest radiograph (arrow, Picture 1). Physical examinations and laboratory studies were normal and his past history was negative. Computed tomography (CT) revealed a primary extrapleural intrathoracic tumor (Picture 2). The homogeneous fatty tumor and the mean attenuation of -116 Hounsfield Units (HU) established the diagnosis as a subpleural lipoma.

Subpleural lipoma is rare. Most patients are asymptomatic and subpleural lipoma is usually discovered incidentally on chest radiograph. It is difficult to make a definitive diagnosis based on chest radiography. CT is a good modality for distinguishing pleural from parenchymal disease, and delineates the fatty composition (-50 to -150 HU). These CT findings allow us to avoid surgery or biopsy.