

## CONTINUING MEDICAL EDUCATION ΣΥΝΕΧΙΖΟΜΕΝΗ ΙΑΤΡΙΚΗ ΕΚΠΑΙΔΕΥΣΗ

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### Medical Imaging Quiz – Case 17

A 28-year-old female presented to the outpatient department of our hospital with a medical history significant for chest pain and repeated pulmonary infections of variable duration and severity.

At that time, the patient developed persistent cough which led her to the pneumonologist. Her general condition was good on physical examination. Laboratory examinations were also normal.

A chest radiography was obtained, that revealed an abnormal shadow and localized hyperlucency in the right medial pulmonary zone (fig. 1). Because of the X-ray findings, the patient presented to our department and underwent chest computed tomography (CT) scan after contrast medium infusion. Multiplan reconstruction (MPR) was performed (fig. 2), which showed presence of a soft tissue density ramal mass, with no contrast enhancement, in the apical segment of the right lower lobe (RLL). The apical segmental bronchus of the RLL could not be detected but distally to the obliterated lumen, mucous plug and mucocele was revealed. CT-scan also showed hyperlucency of the corresponding lung and multiple air cysts located at the affected lung surface (fig. 3).



Figure 1



Figure 2



Figure 3

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#### Comment

*Mucus secreted within the airways distal to the obliterated lumen cannot pass the bronchial stenosis and causes mucous plugs and mucocele. The affected lung is hyperlucent because of the air trapping at expiration. CT-scan with MPR is fundamental for the characterization and localization of the lesion and helps make a precise diagnosis. Surgery is performed in case of complications.*

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*Diagnosis: Congenital bronchial atresia*

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