Accessory cardiac bronchus: a rare anatomic variant and its clinical importance

Published on 03.06.2019

ISSN: 1563-4086
Section: Chest imaging
Area of Interest: Abdomen Anatomy Biliary Tract / Gallbladder Kidney Liver Lung
Imaging Technique: CT
Imaging Technique: MR
Imaging Technique: MR-Cholangiography
Imaging Technique: Ultrasound
Case Type: Clinical Cases
Authors: Emil Settarzade
Workplace:

Patient: 55 years, male

Clinical History:
A 55-year-old man presented with haemoptysis. He was not a smoker and denied a past history of respiratory disease.

Imaging Findings:
The computed tomography (CT) revealed short blind-ending anomalous bronchus arising from the medial wall of the bronchus intermedius compatible with accessory cardiac bronchus (Fig. 1, 2).

Discussion:
The accessory cardiac bronchus is a rare anatomic variant with a reported incidence of 0.09-0.5% and is the only true supernumerary anomalous bronchus [1]. In approximately 50% of cases the ACB is a short blind-ending pouch with no branches and in the remainder it may have branches. Although most of the patients with ACB are asymptomatic, symptomatic patients frequently present with a recurrent chest infection, probably pooling of secretions in the blind-ending pouch, and haemoptysis [2]. At the same time, malignant pathologies deriving from ACB have been reported in the literature [3-5]. Surgical resection may be indicated in patients with recurrent or severe symptoms [6].

Computed tomography of the chest is a modality of choice to determine cardiac bronchus as well as bronchography and bronchoscopy, yet it is not recognisable on plain chest radiograph [2]. The dimensions of ACB are 8-9 mm in diameter and 12 mm in length [6]. The recognition of ACB is important, as it should be differentiated from other pathologies such as diverticulum and bronchial fistula.

Teaching point:
The radiologists should recognise accessory cardiac bronchus to avoid unnecessary investigations and in some cases, to explain possible complications such as infection, hemoptysis, etc.

Written patient consent for this case was waived by the Editorial Board. Patient data may have been modified to ensure patient anonymity.

**Differential Diagnosis List:** Accessory cardiac bronchus, Diverticulum, Bronchial fistula

**Final Diagnosis:** Accessory cardiac bronchus

**References:**


Description: A CT scan shows an extra bronchus (arrow) next to bronchus intermedius. Origin: Department of Radiology, Hacettepe University Faculty of Medicine, Ankara, Turkey, 2019
Description: Axial CT image show an accessory cardiac bronchus (arrow) arising from the medial aspect of the bronchus intermedius (arrowhead). Origin: Department of Radiology, Hacettepe University Faculty of Medicine, Ankara, Turkey, 2019

Description: Coronal CT image show an accessory cardiac bronchus (arrow) arising from the medial aspect of the bronchus intermedius (arrowhead). Origin: Department of Radiology, Hacettepe University Faculty of Medicine, Ankara, Turkey, 2019