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Case Study

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ACCESSORY LOBE OF RIGHT LUNG AND ITS CLINICAL IMPLICATIONS -CASE REPORT

***Anju Choudhary and Surajit Ghatak**

Department of Anatomy, All India Institute of Medical Sciences, Jodhpur.

***Corresponding Author: Anju Choudhary**

Department of Anatomy, All India Institute of Medical Sciences, Jodhpur.

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ABSTRACT

Objective: Lungs are among the vital organs of human body. Anatomical variations of lungs are common in clinical practice and are usually asymptomatic. Defective pulmonary development results variations in lobes and fissures. Knowledge of morphological variations are important for the surgeons performing lobectomies or segmentectomies to avoid possible injuries. Clinicians may misinterpret such variations in radiological images. **Case Report**: During routine dissection of thorax in a male cadaver with first year undergraduate MBBS students in the department of Anatomy, we observed a case of accessory lobe in the right lung with other variations. Fissure and lobes of left lung was normal. **Conclusion:** Recognition of such variations provides additional information to cardiothoracic surgeons and radiologist to differentiate it from other normal anatomical and pathological structures. Perioperative identification of such variations are imperative before performing surgeries.

KEYWORDS: lung, pulmonary, lobectomy, cardiothoracic.

INTRODUCTION

Lungs are among the vital organs of human body. Anatomical variations of lungs are common in clinical practice and are usually asymptomatic. Defective pulmonary development results variations in lobes and fissures.[1] Developmental anomalies of the lung are important because they can cause complications during infancy, early childhood and adult period.

Development of lung starts twenty eight days of embryonic life. During development as the lung grows the spaces that are separating the individual bronchopulmonary segments become obliterated except along the two planes oblique and horizontal which results formation of fissures. Due to partial or incomplete obliteration leads to incomplete fissures and accessory lobes.[2] Knowledge of morphological variations are important for the surgeons performing lobectomies or segmentectomies to avoid possible injuries. Clinicians may misinterpret such variations in radiological images. Accessary fissure can cause diagnostic confusion, it can mimic atelectasis, scar, mass or plural effusion in radiographs.[3] Recognition of these accessory fissure provides additional information in segmental localization of lesions.[4]

CASE REPORT

During routine dissection of thorax in a male cadaver with first year undergraduate MBBS students in the department of Anatomy, we observed a case of accessory lobe in the right lung with other variations. Fissure and lobes of left lung was normal.

Figure 1,2: Medial surface of right lung showing accessory lobe and fissure.

DISCUSSION

Developmental anomalies of lungs are important because they can create complications. The part of lung that is separated off by an accessory fissure has been termed an accessory lobe.[5]

Various case report have described in the lung In our case we found an unusual fissure and alobe in the right lung on the medial side, an incomplete fissure which was separating a linguala like lobe in the lung with intact hilum. It was continuous with inferior surface.

W Sieber et al reported a small accessory lobe in right lung separated from rest of upper lobe by deep groove containing azygos vein.[6]

Gopal Sharma et al found an accessory fissure in the left lung which divided the lung into three lobes.[7]

Kosuri kalian et al encountered a different lobar pattern of the left lung in which left lung was completely divided into anterior and posterior lobes by a vertical fissure and the anterior lobe of lung was divided by an incomplete oblique fissure in to upper and lower lobe.[8]

Vasuki et al reported a case of Accessory lobe of right lung between middle and lower lobe in a male cadaver.[9]

Thomas J E M encountered a case of non azygous accessory fissure between the apical and the anterior segments of right upper lobe, along with superior and inferior accessory fissures in the right lower lobe.[10]

CONCLUSION

The Anatomical variations are of clinical importance and academic interest. Recognition of such variations provides additional information to cardiothoracic surgeons and radiologist to differentiate it from other normal anatomical and pathological structures. Perioperative identification of such variations are imperative before performing surgeries.

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