

## Conference Abstract

DAY 1 15<sup>th</sup> September 2023 (Friday)

ORAL 1

2.00-3.30 pm

Scientific Session 2

**A Study of variations in the gross features of lungs and its clinical implications****Nidhi.S, Divia Paul A, Jazeela B F**

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**Background:** Lungs are respiratory organs situated on either side of the heart in the thoracic cavity. The right lung has 3 lobes –superior, middle and inferior lobes divided by oblique and horizontal fissures. Left lung is divided into 2 lobes –Superior and inferior lobes divided by an oblique fissure. Incomplete formations of the fissures leads to a merging of lobes and conversely accessory lobes form due to the formation of new fissures. Studying about lung fissures and accessory lobes helps in planning pulmonary surgeries. Grading the fissures of both lungs can prevent post operative haemorrhage and complications.

**Aim:** To study the variations in the gross features of cadaveric lungs.

**Methods:** Forty one formalin fixed cadaveric specimens (20 right and 21 left lungs) were selected for the study in the Department of Anatomy, Yenepoya Medical College, Mangalore. Variations in the gross features of the lungs were noted.

**Results:** Three right sided and five left sided lungs showed incomplete oblique fissure. Incomplete horizontal fissure of right lung was observed in eight lungs. Two right sided and 2 left sided lungs showed absence of fissures. No accessory fissures or lobes were noted.

**Conclusion:** Awareness regarding anatomical variations of lungs is essential for performing lobectomies and segmental resection and interpreting radiological images. In incomplete fissures where there is a fusion of lung parenchymas, more dissection has to be performed to reach the bronchi and pulmonary vessels which may cause haemorrhage and post operative complications during surgical resections. Genetic and environmental factors during the development of lungs may result in variations in the oblique and horizontal fissures in the lungs.

**Key words:** Lungs, lobes, fissures.