

Clinical Image

Finger in Glove Sign

Vishnukanth Govindaraj

Assistant Professor, Department of Pulmonary Medicine, Jawaharlal Institute of Postgraduate Medical Education and Research (JIPMER), Puducherry-605006.

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ABSTRACT

Finger in Glove Sign detected on chest radiograph and CT scan is due to mucoid impactions in large air ways. They are usually visualized as tubular opacities and may occur in congenital conditions like bronchial atresia, cystic fibrosis and also in acquired diseases like ABPA, bronchiectasis, foreign bodies, tumors, bronchial asthma and tuberculosis. Mucoid impaction should be differentiated from other disease processes like Arteriovenous malformations which can be excluded from doing a contrast study. In patients with smoking history, a bronchoscopy is advised to rule out malignancy

Keywords: Finger in Glove Sign, tubular opacities, mucoid impactions.

INTRODUCTION

Mintzer et al in 1978 used the term finger - in - glove in their description of radiological features in a case of allergic bronchopulmonary aspergillosis (ABPA).^[1] However even earlier in 1951, Shaw described dilated bronchi filled with inspissated mucus in patients with history of allergy and wheezing. Mucoid impaction is defined as airway filling by mucoid secretions.^[2] In conditions like bronchiectasis where the airways are dilated, the filled up secretions may be visible on chest radiographs or CT images as tubular or branching opacities. These opacities, which typically radiate from the hilum toward the periphery of the lung, are classically described as the finger-in-glove sign.^[3] On CT images, these opacities are found to course alongside neighboring pulmonary arteries.

Finger - in - glove sign is classically associated with allergic bronchopulmonary aspergillosis. However it may also be seen in various congenital and acquired conditions like congenital bronchial atresia,

post inflammatory bronchiectasis, broncholithiasis, foreign body aspiration, bronchial hamartoma, lipoma and papillomatosis.

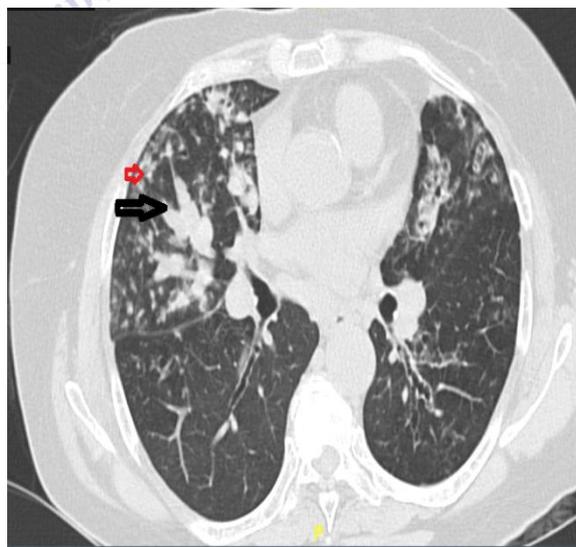


Fig 1: showing finger in glove appearance in the right upper lobe (black arrow). Also few tree in bud nodules are also seen. (Red arrow)

Malignancies like bronchogenic carcinoma, carcinoid tumor and metastases can also present with this sign.^[3,4] Though

evident on CXR, a CT chest is required to rule out other causes. In patients with central mucus impaction, a bronchoscopy is advised to rule out bronchogenic carcinoma. [5]

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