Solitary Squamous Papilloma-Rare Endobronchial Lesion-Case Report and Review of Literature

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ABSTRACT

Introduction: Solitary squamous papilloma are very uncommon but benign neoplasms of the lower respiratory tract. Since it arises from the bronchus, it is widely regarded as the most rarest pulmonary neoplasm.

Case report: In this case report, we describe the clinical and imaging features of solitary squamous papilloma, an endobronchial mass lesion in a nineteen year old male along with histo-pathological correlation to give ideal management of these lesions.

Conclusion: Solitary squamous papilloma is a rare pulmonary tumor. Early detection by computed tomography and appropriate treatment can prevent further complications and reduce unwanted resection.

Keywords: Squamous papilloma, Bronchus, Computed tomography

INTRODUCTION

Solitary endobronchial papilloma are rare benign tumors with only few cases reported in literature to date. They are known to occur in the lower respiratory tract with rare occurrence in the upper respiratory tract. They often seen in middle aged adults, appearing as a discrete polyposid mass lesion, typically located within the trachea, lobular or segmental bronchus.¹ ²

CASE REPORT

A nineteen year old non smoker male, visited to the Department of Radiology and Imaging sciences, Sri Ramachandra Medical College and Hospital, Porur, Chennai, and presented with complaints of breathlessness (grade III MMRC) for the past six months duration. He also gave history of cough with expectoration with minimal foul smelling whitish sputum, chest pain and fever, which was intermittent, associated with chills, rigors. No history of hemoptysis, orthopnea and paroxysmal nocturnal dyspnea. Past medical history revealed that he was a known asthmatic for the past six months. On physical examination there was reduced air entry with occasional rhonchi on the right side. Routine blood sample analysis were within normal limits.

Chest radiograph revealed consolidation with significant collapse of the right lower lobe (Figure 1). In view of the chest radiograph findings the patient was further evaluated with contrast enhanced computed tomography of chest. Contrast enhanced computed tomography of chest revealed an enhancing endobronchial mass lesion of size 3 x 1.5cm seen occupying the right lower lobe main bronchus, causing occlusion (Figure 2a, 2b, 3a). The lesion delays the blood supply mainly from the bronchial arteries. There was no evidence of calcification seen within the endobronchial mass lesion. Fluid bronchogram was seen within the collapsed right lower lobe. Extensive mediastinal lymphadenopathy and few nodular opacities in the medial basal segment of right lower lobe were also seen (Figure 3b).

Following radiological evidence of an endobronchial mass lesion, Bronchoscopy also revealed an endobronchial mass occluding the right bronchus intermedius (Figure 4a). Right upper lobe bronchus and left bronchial tree were normal. Punch biopsy (Figure 4b) and bronchial wash performed from endobronchial mass lesion and sent for histo-pathological examination. Histo-pathological analysis revealed hyper plastic, edematous squamous epithelium with subepithelium showing focal areas of mucous impaction suggestive of squamous papilloma.

DISCUSSION

Squamous papilloma of lung are comparatively unusual, should be included in the differential diagnosis of benign neoplasms. Multiple papillomas, inflammatory polyps and solitary papilloma are the three clinically described presentations. Multiple papillomas, inflammatory polyps and solitary papilloma are the three clinically described presentations. Multiple papillomas, inflammatory polyps and solitary papilloma are the three clinically described presentations. Multiple papillomas, inflammatory polyps and solitary papilloma are the three clinically described presentations. Multiple papillomas, inflammatory polyps and solitary papilloma are the three clinically described presentations. Multiple papillomas, inflammatory polyps and solitary papilloma are the three clinically described presentations. Multiple papillomas, inflammatory polyps and solitary papilloma are the three clinically described presentations. Multiple papillomas, inflammatory polyps and solitary papilloma are the three clinically described presentations. Multiple papillomas, inflammatory polyps and solitary papilloma are the three clinically described presentations. Multiple papillomas, inflammatory polyps and solitary papilloma are the three clinically described presentations. Multiple papillomas, inflammatory polyps and solitary papilloma are the three clinically described presentations. Multiple papillomas, inflammatory polyps and solitary papilloma are the three clinically described presentations. Multiple papillomas, inflammatory polyps and solitary papilloma are the three clinically described presentations. Multiple papillomas, inflammatory polyps and solitary papilloma are the three clinically described presentations. Multiple papillomas, inflammatory polyps and solitary papilloma are the three clinically described presentations. Multiple papillomas, inflammatory polyps and solitary papilloma are the three clinically described presentations. Multiple papillomas, inflammatory polyps and solitary papilloma are the three clinically described presentations. Multiple papillomas, inflammatory polyps and solitary papilloma are the three clinically described presentations. Multiple papillomas, inflammatory polyps and solitary papilloma are the three clinically described presentations. Multiple papillomas, inflammatory polyps and solitary papilloma are the three clinically described presentations. Multiple papillomas, inflammatory polyps and solitary papilloma are the three clinically described presentations. Multiple papillomas, inflammatory polyps and solitary papilloma are the three clinically described presentations. Multiple papillomas, inflammatory polyps and solitary papilloma are the three clinically described presentations. Multiple papillomas, inflammatory polyps and solitary papilloma are the three clinically described presentations. Multiple papillomas, inflammatory polyps and solitary papilloma are the three clinically described presentations. Multiple papillomas, inflammatory polyps and solitary papilloma are the three clinically described presentations. Multiple papillomas, inflammatory polyps and solitary papilloma are the three clinically described presentations. Multiple papillomas, inflammatory polyps and solitary papilloma are the three clinically described presentations. Multiple papillomas, inflammatory polyps and solitary papilloma are the three clinically described presentations. Multiple papillomas, inflammatory polyps and solitary papilloma are the three clinically described presentations. Multiple papillomas, inflammatory polyps and solitary papilloma are the three clinically described presentations. Multiple papillomas, inflammatory polyps and solitary papilloma are the three clinically described presentations. Multiple papillomas, inflammatory polyps and solitary papilloma are the three clinically described presentations. Multiple papillomas, inflammatory polyps and solitary papilloma are the three clinically described presentations. Multiple papillomas, inflammatory polyps and solitary papilloma are the three clinically described presentations. Multiple papillomas, inflammatory polyps and solitary papilloma are the three clinically described presentations. Multiple papillomas, inflammatory polyps and solitary papilloma are the three clinically described presentations. Multiple papillomas, inflammatory polyps and solitary papilloma are the three clinically described presentations. Multiple papillomas, inflammatory polyps and solitary papilloma are the three clinically described presentations. Multiple papillomas, inflammatory polyps and solitary papilloma are the three clinically described presentations.

They are more common among the middle age males than females. Patients with postobstructive pneumonia, bronchiectasis produced by solitary papillomas, fever is very common. Chest x-rays may show a hilar mass, lobar collapse

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or even normal in some cases. Location of most lesions were either segmental or central bronchi and few were seen in sub

Figure-1: Chest radiograph frontal projection shows consolidation with significant collapse of the right lower lobe(right arrow).

Figure 2a and b: Contrast enhanced computed tomography of chest-mediastinal window on axial and coronal view shows an enhancing endobronchial mass lesion seen occupying the right lower lobe main bronchus causing occlusion.(Right arrow on 2a, Curved up arrow on 2b)

Figure 3a and b: Contrast enhanced computed tomography of chest-mediastinal window sagittal view shows an enhancing endobronchial mass lesion seen occupying the right lower lobe main bronchus causing occlusion(left arrow) and axial image- lung window shows nodular opacities in the medial basal segment of right lower lobe(right arrow).

Figure 4a and b: Bronchoscopic view showing endobronchial mass occluding the right bronchus intermedius and punch biopsy of the endobronchial mass.

CONCLUSION

Solitary squamous papilloma is a rare pulmonary tumor. Computed tomography plays an important role in the differential diagnosis of endobronchial mass lesions that give combination of imaging features inclusive of site, type of lesion, presence of fat and pattern of calcification. Early diagnosis is essential.
to rule out malignant lesions, further complications, and avert resection in benign self-limited lesions.

REFERENCES


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