

## **Lung Cancer**

**TOPIC:** Lung Cancer

TYPE: Global Case Reports

## ENDOBRONCHIAL SCHWANNOMA: VERY RARE TUMOR DISCOVERED ACCIDENTLY DURING FOB FOR LEFT LOWER LOBE COLLAPSE

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**INTRODUCTION:** In the mediastinum, Schwannomas are fairly common. Endobronchial position is extremely uncommon, with only a few cases reported in the literature.

CASE PRESENTATION: An 80-year-old man presented in the emergency department with a 3-day history of fever 39 °C, general malaise, dry cough, myalgia, headache &loss of appetite. Chest X-ray on admission (IMAGE 1) revealed partial right lower lobe collapse (RLL). A diagnosis of aspiration pneumonia secondary to dysphagia was established, received AB with chest physiotherapy with gradual improvement of his condition. CKD, former smoker SI 20, AF, daistoic dysfunction. Then the patient started to be deteriorated with decrease conscious level due to metabolic cause where invasive mechanical ventilation was initiated. CXR was done which revealed left lower lobe collapse. IMAGE 2). Fiberoptic bronchoscopy showed Mucous plug obstructing left lower lobe bronchus which relieved by frequent suction.a nodule in the left bronchial tree, at the ridge between left upper lobe bronchus and left lower lobe bronchus. (IMAGE 3) The nodule was about 1 cm diameter, surface was smooth, shiny and vascularized. o Bronchoscopic removal of this nodules with mild bleeding which controlled spontaneously.o Another nodule on right side detected on ridge between right lower lobe bronchus and middle lobe bronchus. (IMAGE 4) Microscopic description: Given microphotographs (IMAGE 5 and IMAGE 6 display histological features of Bronchial schwannoma, comprising of a relatively circumscribed sub bronchial spindle cell neoplasm showing compact hypercellular (Antoni A) and hypocellular (Antoni B) areas. Nuclear palisading around fibrillary process (verocay bodies) is also appreciable. Cytologicaly cells are narrow, elongated and wavy with tapered ends interspersed with collagen fibers. Tumor cells have ill-defined cytoplasm, dense chromatin and mild atypia. No mitotic figures identified o (IMAGE 7) S100: Immunohistochemical stains show diffuse S100 positivity. Extended panel of immunohistochemical including Cytokeratin, CD117, SMA, CD34 and H-Caldesomon also performed and all turns negative.consultation to thoracic surgery team was done to elect the best way of management as the patient has is not candidate for surgery at time being.

**DISCUSSION:** Despite being a rare neoplasm schwannoma can occur in any area of the tracheobronchial tree(1,2,3,4). Most of symptoms are nonspecific(5) The accurate diagnosis depends upon histopathological criteria including presence of typical Antoni A formation and Verocay bodies in hematoxylin and eosin stains (6) Bronchoscopic treatment has been recently utilized for benign tracheobronchial tumors. It has been shown to be a safe and effective tool.(7,8)

**CONCLUSIONS:** This is a case of endobronchial schwannoma was discovered accidently during FOB for left lower lobe collapse due to mucous plug, diagnosed according to histopathological criteria.

REFERENCE #1: Shah H, Garbe L, Nussbaum E, Dumon JF, Chiodera PL, Cavaliere S. Benign tumors of the tracheobronchial tree: endoscopic characteris- tics and role of laser resection. Chest 1995; 107: 1744-51.2. Kasahara K, Fukuoka K, Konishi M, et al. Two cases of endobronchial neurilemmoma and review of the literature in Japan. Intern Med 2003; 42: 1215-8.3. Stack PS, Steckler RM. Tracheal neurilemmoma: case report and re- view of the literature. Head Neck 1990; 12: 436-9.4. Shirakusa T, Takada S, Yamazaki S, et al. Intrabronchial neurilem- moma: review of cases in Japan. Thorac Cardiovasc Surg 1989; 37: 388-90.5. Oxner CR, Shinners MJ, Godin DA, Lyn IT, Brent RB, McFadden PM. Obstructing tracheobronchial schwannoma. J La State Med Soc 2005; 157: 159-61.6.Lee BR, Choi YD, Kim YI, Lim SC, Kwon YS. Endobronchial schwannoma treated by rigid bronchoscopy with argon plasma co- agulation. Tuberc Respir Dis 2012; 73: 174-7. 7. Suzuki H, Sekine Y, Motohashi S, et al. Endobronchial neurogenic tumors treated by transbronchial electrical snaring and Nd-YAG la- ser abrasion: report of three cases. Surg Today 2005; 35: 243-6.8. Kwon YS, Kim H, Koh WJ, et al. Clinical characteristics and efficacy of bronchoscopic intervention for tracheobronchial leiomyoma. Respirology 2008; 13: 908-12.

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