

中文題目：聲帶鱗狀上皮細胞癌之慢性阻塞性肺病患併發反覆急性惡化

英文題目：Vocal Cord Squamous Cell Carcinoma in a COPD patient with frequent and recurrent Acute Exacerbation

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## **Abstract**

### *Background*

Exacerbations of chronic obstructive pulmonary disease (COPD) increase morbidity, mortality, resource burden and healthcare costs. The symptoms of vocal cord cancer can be nonspecific. It has high tendency to be overlooked when the patient has complicated chronic respiratory disease. The relationship between vocal cord cancer and COPD acute exacerbation hasn't been established in previous studies. Here we report a case of vocal cord squamous cell carcinoma in an 81-year-old COPD patient, complicated with frequent and recurrent acute exacerbation in the past 10 months.

### *Case report*

An 81-year-old man with a history of smoking for more than 20 years, presented to the emergency department of our hospital with progressive dyspnea, fever and productive cough. He was diagnosed with moderate obstructive ventilation impairment COPD in GOLD category II 18 months ago and had been experiencing increased recurrent episodes of acute exacerbations for 10 months despite increasing dosages of bronchodilator. On presentation, physical examination showed bilateral wheezing and no audible heart murmur, hoarseness and stridor were also noted. CXR suggested emphysematous change with secondary lung infection. The patient's respiratory symptoms were relieved by bronchodilator and intravenous steroids. After admission, stridor and hoarseness didn't improve, therefore we consulted ENT and neurologist. Laryngoscope identified bilateral vocal cord paralysis and the presence of bilateral vocal cord neoplastic mass. Lateralization of the vocal cord was performed by an ENT specialist after comprehensive evaluation of the patient. Biopsy was achieved and a diagnosis of squamous cell carcinoma of the vocal cord was made. His progressive dyspnea improved, and the frequent and recurrent acute exacerbation of COPD subsided.

### *Discussion*

Acute exacerbations are an important component of the clinical course in COPD. Although respiratory infections are the main risk factors for exacerbation of COPD, other conditions, including industrial pollutants, allergens, sedatives, congestive heart failure and pulmonary embolism, have been identified. But vocal cord cancer induced frequent and recurrent acute exacerbation in COPD patients was reported rarely. Hoarseness can be caused by a variety of conditions, ranging from simple inflammatory processes to more serious systemic, neurologic, or cancerous conditions involving the larynx. However, stridor on physical examination is a significant finding for upper airway obstruction. Hoarseness and stridor in a patient with COPD prompts the suspicion of a major airway lesion, particularly involvement of the vocal cord. Many COPD patients have experienced wheezing in bilateral lungs in acute exacerbation. But abnormal voice change with stridor points out the possible correlation between the vocal cord disease and acute exacerbation of COPD. We address the relationship specifically for an alert.

### *Conclusion*

Evaluation of hoarseness and stridor in a heavy smoker with frequent COPD exacerbation should consider the possibility of vocal cord cancer through comprehensive examination of the larynx after ruling out other possible etiology.