中文題目: 感染性主動脈瘤併發左喉返神經麻痺—案例報告 英文題目: Thoracic Infected(Mycotic) Aneurysm With Left Recurrent Laryngeal Nerve Paralysis: A Case Report 作 者: 盧律衡<sup>1</sup>, 謝炯昭<sup>2</sup>, 郭美娟<sup>3</sup> 服務單位: 高雄醫學大學附設醫院<sup>1</sup>內科部,<sup>2</sup>心臟血管外科,<sup>3</sup>腎臟內科

## Introduction:

Infected (mycotic) arterial aneurysm of thoracic aorta is rare. Risk factors for infected aneurysm are previous artery injury, antecedent infection, immunosuppressive states, atherosclerosis plaque and preexisting aneurysm. Clinical presentation usually depends on location and size of aneurysm combined with systemic features of infection. Patients may present with sudden onset of severe chest or back pain at first. Sometimes patient just presents as fever of unknown origin. We reported a case of a 80 year-old-male with thoracic infected arterial aneurysm presented with hoarseness.

## Case Report:

A-80-year-old male had past medical history for end stage renal disease under regular hemodialysis, Stanford type B aortic dissection status post endovascular repair of thoracic aneurysm by stent graft(Figure 1), type II diabetes mellitus and hypertension. He was presented to our emergency room due to fever and swelling, redness with local heat over arteriovenous(AV) graft for 3 days. On arrival, his body temperature was 38.1°C, and had tachycardia with high blood pressure of 162/72mmHg. The laboratory test showed leukocytosis of 12610/uL with bandemia(1639.3/uL), elevated C-reactive protein of 348 mg/L. He was then admitted with the diagnosis of AV graft infection. Empirical antibiotic with vancomycin and ceftazidime were prescribed. Three days later, the blood culture yielded Pseudomonas aeruginosa. We removed AV graft and shifted ceftazidime to Meropenem due to persistent fever. Hoarseness was complained one month after admission. We consulted otorhinolaryngologist and immobile left vocal cord was noted. Thyroid echography showed left side thyroid goitor(1.78X1.86cm). The brain magnetic resonance imaging(MRI) showed no specific lesion, including brain stem. The chest computed tomography(CT) revealed enlarged aortic arch aneurysm(8.3cm) with suspicion of hematoma in the intraluminal space. Thoracic endovascular aortic repair(TEVAR) with thoracic stent graft was performed for reducing the risk of aneurysm rupture and her high risk of open surgery. After antibiotic use with Vancomycin for 10 weeks and Meropenem for 8 weeks, we shifted antibiotic to oral Levofloxacin for maintainance therapy and the patient was discharged smoothly.

## Conclusion:

Mycotic aneurysm over aorta is a life-threatening condition because the risk of progressive infection, thrombosis and rupture was high. However, the diagnosis is difficult due to the variety of clinical presentations. We reported a case of thoracic mycotic aneurysm with rare clinical presentation as hoarseness. In hemodialysis patients, transient post-dialysis hoarseness may happen due to decreased vocal fold thickness. Once the hoarseness persistent and not associated with hemodialysis, we should watch out vocal cord palsy and find out the reason. Lesion around upper lung and aortic arch should be taken into consideration for vocal cord palsy.

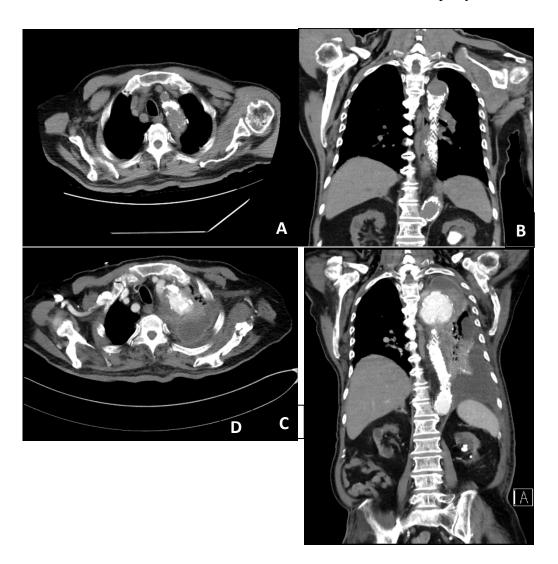


Figure 1. Representative computed tomography (CT) images of patient prior and upon diagnosis. The coronal section (A) and axial section (C) of non-contrast Chest CT of the patient on March 2019, 8 months prior to thoracic mycotic aneurysm diagnosis revealed previous repairment of the thoracic aorta aneurysm with stent in place. The coronal section (B) and axial section (D) of contrast Chest CT revealed markedly worsening of aneurysm in the aortic arch(8.3cm) with suspicion of rupture.