

### Introduction:

Sabah has the highest incidence of pulmonary tuberculosis in Malaysia. Rare presentation of massive haemoptysis poses high mortality and great challenge to management especially in an ill-equipped district hospital. Referral to a tertiary centre is utmost important to district medical officers.

### Case Description:

We present a case of a 71-year-old male with a history of diabetes mellitus and newly diagnosed Pulmonary Tuberculosis who came to emergency department Hospital Kuala Penyu with shortness of breath and massive haemoptysis. Clinically, patient was tachypnoeic.

On arrival, his vitals were BP 152/102, HR 135, RR 30, SpO<sub>2</sub> 67%. Bilateral coarse

crepitations on auscultation. The patient was intubated for hypoxic failure. Post intubation, he required frequent intermittent endotracheal tube suction for bloody secretions. Blood tests show severe anaemia with HB of 5.5. Despite giving IV and nebulised tranexamic acid, the haemoptysis continued and eventually led to cardiac arrest. After ROSC, 1-unit packed cells transfused. Then immediately transferred to Hospital Queen Elizabeth. CTA thorax confirmed the presence of a Rasmussen aneurysm involving the posterior segmental branch of the right lower lobe pulmonary artery. Arterial embolization was successfully performed, and the patient was transferred to ICU for further care.

### Discussion:

Rasmussen aneurysm occurring in approximately 5% of cavitory lesions. To date, there are no published Malaysian case reports, despite rising TB incidence — with Sabah recording the highest number (5,814 cases - 25.6% of total cases). CTA thorax is mandatory in cases of massive haemoptysis. Management varies from urgent bronchoscopy to bronchial artery embolization, though surgical resection may be needed in selected cases.

### Conclusion:

Rasmussen aneurysmal rupture can be a fatal complication of pulmonary tuberculosis. We should be vigilant in managing massive haemoptysis due to its high prevalence in Sabah state. One should always consider transporting patient to centre with respiratory, interventional radiology and cardiothoracic expertise for timely intervention.

### Keywords:

Rasmussen's Aneurysm, Pulmonary Tuberculosis, Massive Haemoptysis

### Reference:

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