中文題目:肺動脈剝離 英文題目:Pulmonary artery Dissection 作 者:鄧世綸, 吳整昌, 陳德坤, 蔡錦焜 服務單位:澄清綜合醫院中港分院重症醫學科

## Introduction:

Pulmonary artery dissection is a rare clinical disease, which has been related to pulmonary arterial hypertension and it may present as chest pain and even cardiogenic shock or sudden death due to cardiac tamponade. In our case report, we will present an old female who experienced this uncommon but lethal disease.

## **Case presentation:**

A 70 year-old female who is a retired cooker and had history of COPD was admitted to our emergent room due to sudden onset of chest pain and near syncope. Besides, dyspnea was also complained. At our ER, her vital signs are unstable as hypotension (BP- 71/40mmHg, T.P.R- 36C, 75/min, 20/min). Electrocardiogram showed normal sinus rhythm. Laboratory data revealed no elevation of cardiac enzyme. After normal saline 2000cc hydration, her blood pressure increased to 108/64mmHg and aorta CT was arranged and disclosed intimal flap with double lumen at the left side of pulmonary trunk, high suspicion of pulmonary artery dissection. Then cardiovascular surgeon was consulted and surgical repair was suggested but the patient refused it due to its high risk nature. Then she received medication control with vasodilators such as nitroglycerine and ACE inhibitors. Three months later since her initial presentation, she remains stable without relapse nor other complications.

## **Discussion:**

Dissection of pulmonary artery is a rare because the pressure of pulmonary artery is marked lower than aorta. Thus it is usually associated with chronic pulmonary hypertension. The risk factors of the patients include chronic obstructive pulmonary disease (COPD), congenital heart disease, valvular heart disease and idiopathic pulmonary hypertension. Usually, the patients of pulmonary artery dissection present as retrosternal chest pain, dyspnea and may rapid progression to cardiogenic shock or sudden death due to cardiac tamponade. Computed tomography angiography (CTA) is the most common and accurate diagnostic modality. There were no standard treatments for this disease due to its relatively small numbers. Surgical repair was the most common treatment by current presented case reports, but with high surgical risk patients or patients who refuse operation, conservative medical treatment with vasodilators may be an alternative treatment choice.

## **Conclusion:**

The pulmonary artery dissection is a rare, not well known but life threatening event. The patients who had risk factors of pulmonary hypertension presentation with chest pain, dyspnea, syncope/near syncope and cardiogenic shock, pulmonary dissection should be included in the differential diagnosis. Timely CTA examination could help us diagnose this disease.

