



2020

## Massive Hemoptysis and Recurrent Infective Endocarditis in Intravenous Drug User: A Case Report

Follow this and additional works at: <https://www.j-saudi-heart.com/jsha>



Part of the [Cardiology Commons](#)



This work is licensed under a [Creative Commons Attribution-Noncommercial-No Derivative Works 4.0 License](#).

### Recommended Citation

Almutairi, Mutlaq; El-ghoneimy, Yasser Ahmed; Alghamdi, Abdulaziz Omar; Alkhamis, Hashem Abdulkarim; Altayyar, Ziyad Abdulmohsen; and Houbani, Khalid Mohsen (2020) "Massive Hemoptysis and Recurrent Infective Endocarditis in Intravenous Drug User: A Case Report," *Journal of the Saudi Heart Association*: Vol. 32 : Iss. 2 , Article 1.

Available at: <https://doi.org/10.37616/2212-5043.1041>

This Case Report is brought to you for free and open access by Journal of the Saudi Heart Association. It has been accepted for inclusion in Journal of the Saudi Heart Association by an authorized editor of Journal of the Saudi Heart Association.

---

## Massive Hemoptysis and Recurrent Infective Endocarditis in Intravenous Drug User: A Case Report

### Cover Page Footnote

This paper was presented at the Australian and New Zealand Society of Cardiac and Thoracic Surgeons Annual Scientific Meeting 2019, in Hobart, Tasmania, Australia, 7-10 November 2019 AS POSTER PRESENTATION.

# Massive Hemoptysis and Recurrent Infective Endocarditis in Intravenous Drug user: A Case Report<sup>☆</sup>

Mutlaq Deghaiman Almutairi\*, Yasser Ahmed El-ghoneimy, Abdulaziz Omar Alghamdi, Hashem Abdulkarim Alkhamis, Ziyad Abdulmohsen Altayyar, Khalid Mohsen Houbani

Surgery Division, Department of Surgery, College of Medicine, King Fahad Hospital of the University, Imam Abdulrahman Bin Faisal University, Dammam, Saudi Arabia

## Abstract

Intravenous drug use (IDU) poses a high risk of serious complications such as infective endocarditis (IE), which carries high morbidity and mortality rates. Mycotic pulmonary artery aneurysms (MPAA) are rarely associated with right-sided IE, especially in the setting of IDU. It is a potentially fatal complication as it can lead to severe hemorrhage if the aneurysm ruptures. We report the case of a young male with a history of current IDU and tricuspid valve replacement post complicated IE 2 years ago. The patient initially presented with massive hemoptysis and fever. Chest computed tomography (CT) showed a lobulated lesion in the right lower lobe with clear continuation to the pulmonary vessels. We aim to draw attention to the magnitude of complications of active IDU, including massive hemoptysis due to MPAA which should be promptly identified and emergently managed with embolization or surgery, followed by counseling and rehabilitation to minimize the risk of recurrence and save these patients.

**Keywords:** Intravenous drug use, Infective endocarditis, Mycotic pulmonary artery aneurysms

## 1. Introduction

**I**nfective endocarditis (IE) is a major cause of morbidity and mortality in the setting of intravenous drug use (IDU). The right side of the heart is more commonly affected, with a specific predisposition for tricuspid valve involvement. Septic emboli can form and dislodge to the pulmonary artery causing potentially serious complications. This includes pneumonia, pulmonary abscess, pulmonary infarction and mycotic pulmonary artery aneurysm (MPAA). In rare cases, rupture of a MPAA can lead to fatal hemorrhage – unless detected early and managed appropriately. We report a case of recurrent IE in a patient with an active history of IDU, presenting to our

hospital with massive hemoptysis due to a ruptured MPAA.

## 2. Case Presentation

A 37-year-old male with an active history of IDU and alcoholism presented with a two day history of low-grade fever and an episode of massive hemoptysis. The hemoptysis was characterized as being bright red in color and approximately 350 mL in volume. Surgical history was significant for open-heart surgery two years prior for tricuspid valve replacement due to infective endocarditis. On admission, he was febrile (38.4 °C), but hemodynamically stable. On general inspection, the patient was jaundiced with a visible sternotomy scar on the chest. Basal lung crackles were appreciated on auscultation.

<sup>☆</sup>This paper was presented at Australian and New Zealand Society of Cardiac and Thoracic Surgeons Annual Scientific Meeting 2019, in Hobart, Tasmania, Australia, 7–10 November 2019 AS POSTER PRESENTATION.

Received 21 November 2019; revised 18 December 2019; accepted 19 December 2019.  
Available online 20 May 2020

\* Corresponding author. Department of Surgery, King Fahad University Hospital, Dammam, Saudi Arabia.  
E-mail address: [Mutlaq.dm95@gmail.com](mailto:Mutlaq.dm95@gmail.com) (M.D. Almutairi).

