

SUPPLEMENT

ABSTRACTS OF THE
SPCCTV 4D VISIONS 2024

CONGRESSO
SPCCTV



VISIONS 24

INTENSIVE CARE

HEART FAILURE BEYOND LIMITS: THE CHALLENGE OF MITRAL VALVE FLAIL

Catarina Pacheco (Portugal) ¹; João Peixoto (Portugal) ¹; Joana Cepeda (Portugal) ¹; Marta Basto (Portugal) ¹; Érico Costa (Portugal) ¹;

1 - ULSTS

Keywords: *Mitral valve flail; Valve repair; Echocardiography;*

Mitral valve flail is a rare and serious cardiac complication with unique diagnostic challenges, requiring targeted surgical and medical approaches to optimise patient outcomes. Its incidence remains low, with the existing literature largely consisting of case reports and small case series, underscoring the need for further investigation.

In the clinical case, we provide an overview of mitral valve flail based on the current literature and our institutional experience. We highlight the unique features of this condition and its relevance to critical care medicine.

We present a case of a 38-year-old male admitted to the emergency department of Centro Hospitalar do Tâmega

e Sousa (CHTS) with severe dyspnea. After initial treatment, he was transferred to the ICU with a suspected diagnosis of severe pneumonia, based on areas of consolidation seen on a thoracic CT scan. On the first day of ICU admission, he developed signs of cardiovascular dysfunction and ventilatory failure. A repeat transthoracic echocardiogram (TTE) revealed flail of the entire anterior leaflet of the mitral valve, causing severe mitral regurgitation. The patient was placed on extracorporeal membrane oxygenation (ECMO) and subsequently underwent mitral valve replacement with a biological prosthesis and tricuspid valve repair, both performed without complications by a specialised surgical team.

SAVING SUBCLAVIAN ARTERIES WITH PERCUTANEOUS APPROACH: A SOLUTION FOR CATHETER MISPLACEMENT

Catarina Pacheco (Portugal) ¹; João Peixoto (Portugal) ; Joana Cepeda (Portugal) ;
Marta Basto (Portugal) ; Érico Costa (Portugal) ;

1 - Unidade Local de Saúde Gaia e Espinho

Keywords: *central venous catheterization; arterial iatrogenic injuries; vascular closure devices;*

INTRODUCTION

Inadvertent placement of a central venous catheter in a major artery has devastating complications if not treated promptly. In critically ill patients, the use of active vascular closure devices is an attractive alternative to achieve adequate hemostasis and preclude the potential risks of an invasive vascular approach. Perclose ProStyle® is a suture-mediated closure system designed to suture puncture sites of femoral vessels. We describe our management of catheter misplacement in a cervical artery in critically ill patients.

METHODS

Retrospective analysis of critically ill patients with 9.5-Fr catheter misplacement in the subclavian artery who underwent removal and suture closure with the ProStyle® system.

RESULTS

Two patients were admitted in the ICU due to septic

shock. One central venous catheterization was performed after admission and the other in the operating room prior to ICU admission. Identification of inadvertent artery catheter placement occurred between 5-6h after ICU admission, after central venous gas sample and chest-radiography analysis. Computer tomography angiography confirmed a right subclavian artery placement. Catheter removal was performed via a fluoroscopy-assisted technique. The ProStyle® device was employed to close the arterial defect successfully. No vascular or neurological complications occurred.

CONCLUSION

ProStyle® system was safe and effective in treating inadvertent cervical artery catheterization in critically ill patients, adding evidence to the existing literature. These cases highlight the importance of detailed clinical records regarding catheter placement procedures, with the possibility of identifying errors and allowing for timely therapeutic intervention. Strengthening educational initiatives and conducting audits could also help to prevent technical errors and ensure adherence to best practices.

