

# Pedunculated mass in left ventricle - An autopsy report

K Balkrishan<sup>1</sup>, S Visalakshi<sup>2\*</sup>, V Sudha<sup>3</sup>

<sup>1</sup>Professor, <sup>2,3</sup>Assistant Professor, Department of Pathology, KAPV Government Medical College, Trichy, Tamil Nadu, INDIA.

Email: [kapvpath@gmail.com](mailto:kapvpath@gmail.com)

## Abstract

A 65 year old man was found dead in a railway platform and he was brought for post mortem examination. Internal organs were sent for histopathological examination. Heart shows a pedunculated mass and it was confirmed as ventricular thrombus.

**Keywords:** Ventricular Mass, Thrombus.

## \*Address for Correspondence:

Dr. S Visalakshi, Assistant Professor, Department of Pathology, KAPV Government Medical College, Trichy, Tamil Nadu, INDIA.

Email: [kapvpath@gmail.com](mailto:kapvpath@gmail.com)

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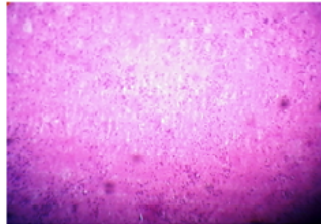
ventricle are mostly thought to be tumors or thrombi<sup>6</sup>. The left ventricular thrombus is usually associated with wall movement dysfunction. Pedunculated cardiac thrombus is extremely rare.

## CASE REPORT

A 65 year old man was found dead and his internal organs were submitted for HPE. His previous medical history was unknown. On gross examination, the heart shows a pedunculated mass measuring 5x3cm attached to the upper posterior wall of ventricle. The stalk was about 1 cm length. Cut Section of the mass shows grey white solid areas with a thin fibrous capsule. Macroscopically it was thought as myxoma. On microscopic examination the mass was confirmed as organised infected thrombus with no evidence of tumor cells.

## INTRODUCTION

This 65 year old man was found dead with unknown medical history. Autopsy study shows a pedunculated mass in the left ventricle. It was identified as organised thrombus in HPE examination. Masses in the left



**Figure 1:** Gross Specimen -pedunculated mass over posterior superior surface of left ventricle

**Figure 2:** Pedunculated mass of left ventricle

**Figure 3:** H and E 10X shows neutrophilic infiltrates in a fibrinous background.

**Figure 4:** H and E 40X shows fibrinous material with peripheral pallor

## MICROSCOPY

Shows eosinophilic fibrin collection with degenerated neutrophils. No evidence of tumor cells. (Fig.3 and 4)

## DISCUSSION

Masses in the left ventricle are usually tumors or thrombi. Primary cardiac tumors are uncommon with incidence of

0.02%. Benign cardiac myxomas in left atrium constitute 88% of cardiac tumors. Whereas left ventricle myxomas are only 2.5% of cases. Left ventricular pedunculated thrombus located in the posterior wall is very rare<sup>2</sup>. Here we made a presumptive diagnosis of left ventricle myxoma based on the appearance of pedunculated mobile mass in left ventricle present in the upper posterior surface. But histologically it was confirmed as organised infected thrombus. Most of the left ventricular thrombus are mural and flat thrombi and have rare embolic manifestation<sup>3</sup>. They commonly involve the apex of the left ventricle most often in the presence of akinesis or dyskinesis<sup>5</sup>. Left ventricle thrombus formation is very rare in the absence of an akinetic or dyskinetic apex or any underlying cardiac disorders.

### CONCLUSION

This case is a very rare presentation because it involves the area that are not akinetic or hypokinetic and it is pedunculous. The most frequently diagnosed cardiac masses are not always neoplasms but tumor like lesions such as cardiac thrombi can mimic these neoplasms. Despite the newer diagnostic techniques this differentiation can be difficult. In this case left ventricle mass that was suspected to be a myxoma on gross examination, was proved as infected thrombus on HPE.

The protruding and mobile mass indicated increased risk of embolic manifestations (60-80%).

### REFERENCES

1. Porter.A., Kandalkar H., Iakobishvili Z., Sagie A., Imbar S., Battler A., et al. Left ventricular mural thrombus after anterior ST – segment – elevation acute myocardial infarction in the era of aggressive reperfusion therapy .
2. Bakhtiari RE, Khaledifar A, Kabiri M, Danesh Z. Mobile pedunculated left ventricular masses in a man with recurrent emboli. *Heart views* 2012; 13:146-8.
3. Glikson M, Agranat O, Ziskind A, Kaplinski E, Vered Z. From swirling to a mobile, pedunculated mass – The evolution of left ventricular thrombus despite full anticoagulation. *Echocardiographic demonstration. Chest* 1993;103:281-3
4. Okuyan E, Okcun B, Dinckal MH, Mutlu H, Risk factors for development of left ventricular thrombus after first acute anterior myocardial infarction – association with anticardiolipin antibodies. *Thromb J* 2010; 8:15.
5. Tsukube T, Okada M, Ootaki Y, Tsuji Y, Yamashita C. Transortic video-assisted removal of a left ventricular thrombus. *Ann Thorac Surg* 1999; 68:1063-5.
6. Kuh JH, Sero Y. Transatrial resection of a left ventricular thrombus after acute myocarditis. *Heart Vessels* 2005; 20:230-2.
7. Yadava OP, Yadav S, Juneja S, Chopra VK, Passey R, Ghadiok R. Left ventricular thrombus sans overt cardiac pathology. *Ann Thorac Surg* 2003; 76:623-5.
8. Keren A, Takemoto T, Harrison DC. POPP RL; Left ventricular apical masses; non invasive differentiation of rare from common ones.

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