

Available online at [www.sciencedirect.com](http://www.sciencedirect.com)

SciVerse ScienceDirect

journal homepage: [www.elsevier.com/locate/ihj](http://www.elsevier.com/locate/ihj)

## Images in Cardiology

# Myocardial abscess secondary to staphylococcal septicemia: Diagnosis with 3D echocardiography

Pankaj Jariwala\*, Arshad Punjani, Shaeq Mirza, Boorugu Harikishan, Dilip Babu Madhwar

Apollo Hospitals, Near Old MLA Quarters, Hyderguda, Hyderabad, Andhra Pradesh 500001, India

### ARTICLE INFO

#### Article history:

Received 12 November 2012

Accepted 19 December 2012

Available online 26 December 2012

#### Keywords

Staphylococcal septicaemia

Myocardial abscess

Three dimensional echocardiography

### ABSTRACT

A 56 years old gentleman with staphylococcal septicemia with metastatic abscesses in spleen and heart. Real time 3D trans thoracic echocardiography could not only confirm the diagnosis of myocardial abscess but also well delineate it and identify adjacent structures.

Copyright © 2012, Cardiological Society of India. All rights reserved.

A 56-years-old gentleman admitted with complaints of fever with chills and rigors, myalgia and malaise since last 2 weeks. On general examination, patient was febrile with sinus tachycardia at pulse rate of 111/min. Also patient had multiple skin abscesses all over body of variable sizes. Patient was hemodynamically stable with blood pressure of 110/70 mm Hg.

His blood tests showed leukocytosis with predominant neutrophilia and mild normochromic, normocytic anemia. His electrocardiogram revealed non-specific ST-changes but no conduction abnormality. There was also evidence of splenic abscesses on his abdominal ultrasound scan. Blood cultures grew *Staphylococcus aureus* and vigorous antibiotic treatment was continued appropriately.

2D echocardiography was advised to rule out infective endocarditis. It showed a small echo-free space in the basal

and mid segments of interventricular septum of the left ventricle, raising suspicion of a myocardial abscess (Fig. 1). There was no evidence of any vegetation over any valve. Real time 3D trans thoracic echocardiography (TTE) showed well defined large myocardial abscess cavity from base of aortic root extending up to mid segment of interventricular septum (Fig. 1).

However, the patient expired after starting of treatment within 5 day secondary to multi-organ failure and irreversible septic shock.

### Conflicts of interest

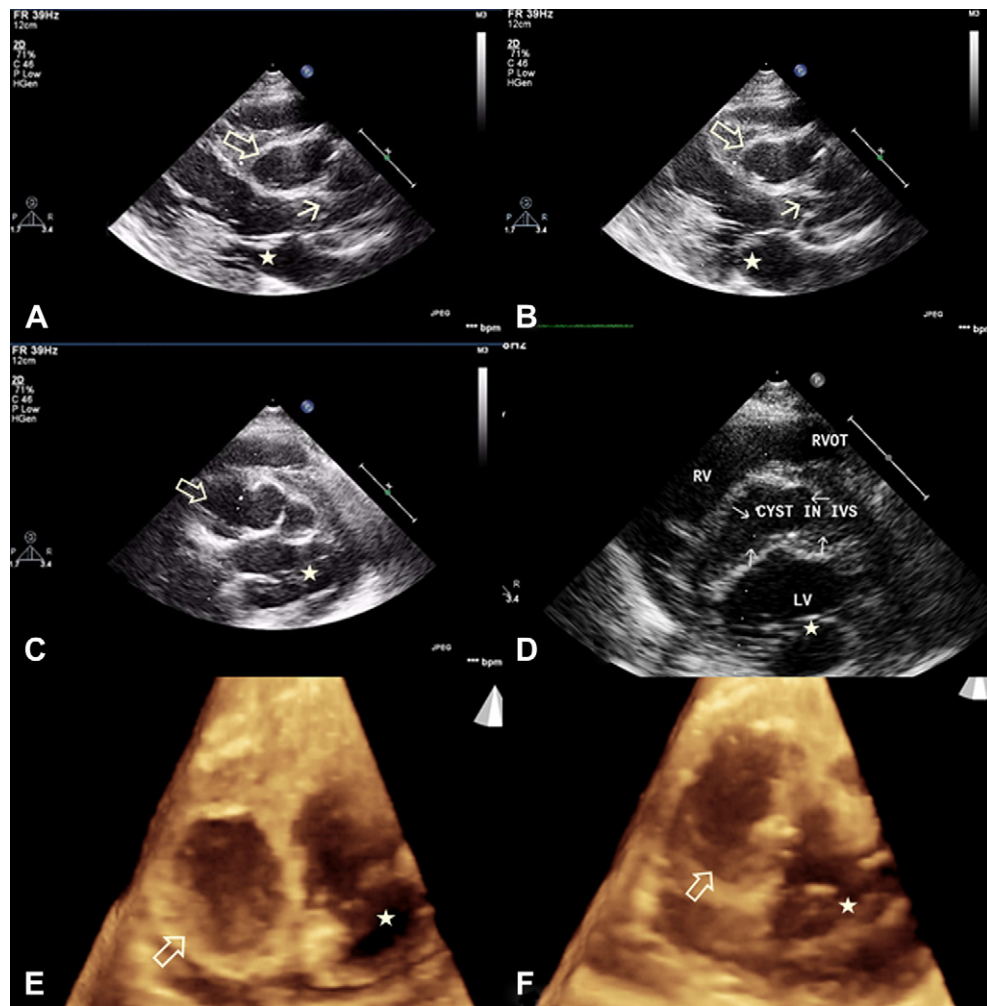
All authors have none to declare.

\* Corresponding author. Tel.: +91 9393178738.

E-mail address: [pankaj\\_jariwala@hotmail.com](mailto:pankaj_jariwala@hotmail.com) (P. Jariwala).

0019-4832/\$ – see front matter Copyright © 2012, Cardiological Society of India. All rights reserved.

<http://dx.doi.org/10.1016/j.ihj.2012.12.005>



**Fig. 1 – A, B:** Parasternal long axis in diastole and systole showing echo-free space [Hollow arrow] at the base of aortic root extending up to mid segment of interventricular septum. There are no vegetations over mitral [Asterisk] or aortic valve [Arrow]. **C:** Short axis view showing extension of echo-free space [Hollow arrow] in the interventricular septum at the level of mitral valve [Asterisk] bulging into LV cavity. The abscess cavity is well defined with irregular septation intra-cavity. **D:** Short axis view showing bulging of echo-free space [Multiple arrows] into right ventricle and right ventricular out flow tract. **E, F:** 3 D echocardiography (TTE) of echo-free space confirmed the diagnosis of myocardial abscess [Hollow arrow]. The cavity of myocardial abscess is well defined and extending deep into interventricular septum up to mid segment at the level of mitral valve [Asterisk].