

## Thromboembolic events of mitral valve endocarditis

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### Presentation and evaluation

A young woman presented with fevers, chills and a holosystolic murmur that radiated to her axilla, and became louder with handgrip maneuvers. Historically she had a primum atrial septal defect, a cleft mitral valve, and atrial septal defect closure with mitral valuloplasty. She had linear splinter hemorrhages under her nailbeds (Fig. 1). She had non-tender, erythematous nodular palmar Janeway lesions and small septic distal ankle (Fig. 2) and digital emboli (Fig. 3). The patient was evaluated by the ophthalmology consultant team, who noted multiple Roth spots on the patient's left eye.

### Diagnosis

Echocardiography revealed a tissue-density mass on the left atrial side of the mitral annulus.

There was one mobile mass that almost prolapsed through the mitral valve (Fig. 4, white arrow). The site of mitral regurgitation is here (Fig. 5, white



Figure 2. Distal ankle emboli.



Figure 1. Splinter hemorrhages.

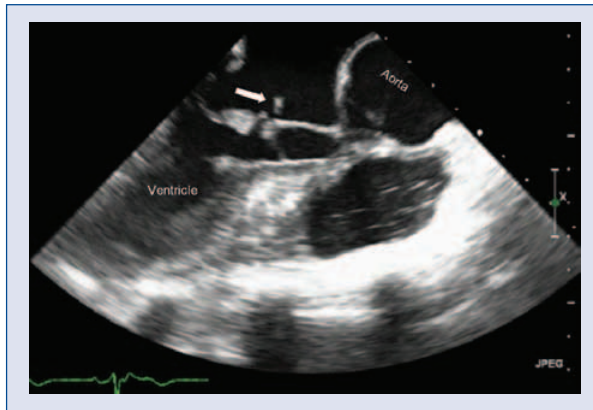


Figure 3. Distal digital emboli.

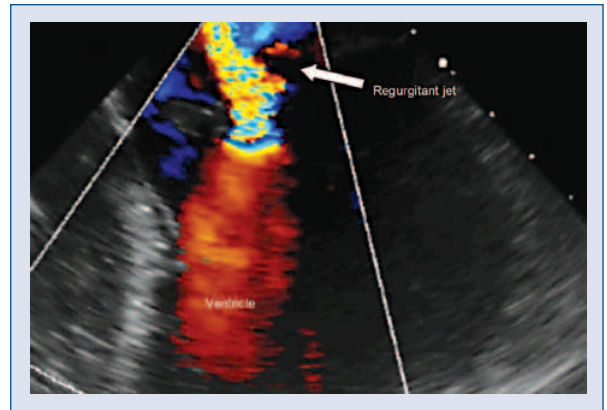
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Received: 11.05.2009

Accepted: 26.05.2009



**Figure 4.** Transesophageal echocardiogram revealed a mobile mass on the inflow side of the mitral valve.



**Figure 5.** Mitral regurgitation noted by color Doppler as severe at the site of the mobile mitral mass.

arrow), which suggests endocarditis. Blood cultures were positive for methicillin sensitive staph aureus. This study confirmed a diagnosis of endocarditis that was already made on clinical grounds.

### Patient management and outcome

She completed six weeks of IV Nafcillin without adverse effects, as an outpatient. Currently, she has resumed her exercise regimen without limitation. A repeat echocardiogram reveals the mitral valve is abnormal and has an atypical pattern of doming. Two jets of mitral regurgitation are appar-

ent. One jet emanates from the coaptation point of anterior and posterior leaflet. There also appears to be a tear in the anterior leaflet, where another jet originates. The degree of mitral regurgitation is now moderate to severe. Surveillance echocardiography will be performed, and, although currently asymptomatic, surgical options are being discussed.

### Acknowledgements

The authors do not report any conflict of interest regarding this work.