

## Cork and smoke

### Peer reviewed clinical letter

Peter Wenaweser, Christian Seiler,  
Yves Allemann

Cardiology,  
Swiss Cardiovascular Center Bern,  
University Hospital, Bern,  
Switzerland

A 45-year-old woman from Morocco who was visiting family members in Switzerland, presented to the emergency department because of exacerbation of a known exercise intolerance and left lateral chest pain. The only medication she had was aspirin 100 mg/d. Clinical examination revealed an irregular rapid pulse, a low pitched diastolic murmur and mild signs of congestive heart failure. The ECG confirmed atrial fibrillation with rapid ventricular response and the chest x-ray showed left atrial enlargement with elevated left bronchus, mild pulmonary vascu-

lar congestion and calcification of the mitral annulus. Based on the patient's origin and the clinical findings, severe mitral stenosis of rheumatic origin was diagnosed and transoesophageal echocardiography was performed. The latter examination confirmed severe mitral stenosis with an averaged mean transmitral pressure gradient of 10 mm Hg (continuous-wave Doppler, approximate ventricular rate of 70 beats per min.), a valve orifice area varying between 0.5 to 0.8 cm<sup>2</sup> depending on the method used (two-dimensional planimetry or pressure half time). The mitral leaflets were mildly thickened and calcified, had reduced diastolic motion and showed a doming (figure 1). The valve annulus and the subvalvular apparatus displayed only mild degenerative changes. There was almost no mitral regurgitation and the systolic transtricuspid pressure gradient was 42 mm Hg. The most impressive finding of the examination was a huge thrombus in the appendage of the dilated left atrium which itself filled with spontaneous echocontrast

("smoke") (figure 1). The thrombus looked like a "cork" that would have been shaped to fit into and occlude the appendage. Before mitral valve balloon valvuloplasty was attempted, the patient was anticoagulated for 1 month and transoesophageal echocardiography was repeated. The thrombotic cork had "melted" but not completely (figure 2). After another 4 months of anticoagulation a third transoesophageal echocardiography was performed and showed that the thrombus had completely disappeared. A balloon valvuloplasty was successfully performed.

#### Correspondence:

Yves Allemann, MD

Cardiology,

Swiss Cardiovascular Center Bern

University Hospital, Inselspital

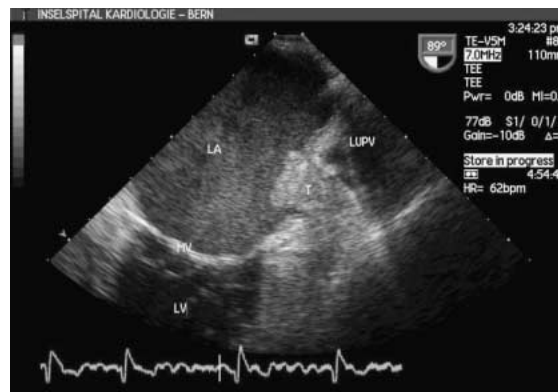
CH-3010 Bern

e-mail: yves.allemann@insel.ch

**Figure 1**

Transoesophageal  
echocardiography.

T: thrombus;  
LA: left atrium;  
MV: mitral valve;  
LUPV: left upper pulmonary vein;  
LV: left ventricle.



**Figure 2**

Transoesophageal  
echocardiography after 1 month  
of anticoagulation.

T: thrombus;  
LA: left atrium;  
LAA: left atrial appendage;  
LUPV: left upper pulmonary vein.



## The many reasons why you should choose SMW to publish your research

### What Swiss Medical Weekly has to offer:

- SMW's impact factor has been steadily rising, to the current 1.537
- Open access to the publication via the Internet, therefore wide audience and impact
- Rapid listing in Medline
- LinkOut-button from PubMed with link to the full text website <http://www.smw.ch> (direct link from each SMW record in PubMed)
- No-nonsense submission – you submit a single copy of your manuscript by e-mail attachment
- Peer review based on a broad spectrum of international academic referees
- Assistance of our professional statistician for every article with statistical analyses
- Fast peer review, by e-mail exchange with the referees
- Prompt decisions based on weekly conferences of the Editorial Board
- Prompt notification on the status of your manuscript by e-mail
- Professional English copy editing
- No page charges and attractive colour offprints at no extra cost

### Editorial Board

Prof. Jean-Michel Dayer, Geneva  
 Prof. Peter Gehr, Berne  
 Prof. André P. Perruchoud, Basel  
 Prof. Andreas Schaffner, Zurich  
 (Editor in chief)  
 Prof. Werner Straub, Berne  
 Prof. Ludwig von Segesser, Lausanne

### International Advisory Committee

Prof. K. E. Juhani Airaksinen, Turku, Finland  
 Prof. Anthony Bayes de Luna, Barcelona, Spain  
 Prof. Hubert E. Blum, Freiburg, Germany  
 Prof. Walter E. Haefeli, Heidelberg, Germany  
 Prof. Nino Kuenzli, Los Angeles, USA  
 Prof. René Lutter, Amsterdam,  
 The Netherlands  
 Prof. Claude Martin, Marseille, France  
 Prof. Josef Patsch, Innsbruck, Austria  
 Prof. Luigi Tavazzi, Pavia, Italy

We evaluate manuscripts of broad clinical interest from all specialities, including experimental medicine and clinical investigation.

We look forward to receiving your paper!

Guidelines for authors:

[http://www.smw.ch/set\\_authors.html](http://www.smw.ch/set_authors.html)

### Impact factor Swiss Medical Weekly



All manuscripts should be sent in electronic form, to:

EMH Swiss Medical Publishers Ltd.  
 SMW Editorial Secretariat  
 Farnsburgerstrasse 8  
 CH-4132 Muttenz

Manuscripts: [submission@smw.ch](mailto:submission@smw.ch)  
 Letters to the editor: [letters@smw.ch](mailto:letters@smw.ch)  
 Editorial Board: [red@smw.ch](mailto:red@smw.ch)  
 Internet: <http://www.smw.ch>