Images in cardiology. Left atrial ball thrombus

BEGHETTI, Maurice, OBERHANSLI, Ingrid, FRIEDLI, Beat


DOI : 10.1136/hrt.79.1.85
PMID : 9505926

Available at:
http://archive-ouverte.unige.ch/unige:74622

Disclaimer: layout of this document may differ from the published version.
A 13 year old girl with rheumatic mitral valve disease was referred for surgical repair. She became symptomatic eight months before admission with dyspnoea and several episodes of pulmonary oedema. On arrival at our centre she was in sinus rhythm and was New York Heart Association (NYHA) grade III-IV despite maximal treatment.

Transcatheter echocardiography revealed a severe mitral stenosis. The left atrium was severely enlarged at 4.5 cm with a large ball thrombus 2.6 cm in diameter. Short axis (A), long axis (B), and modified four chamber (C) views showed the ball thrombus located above the anterior mitral leaflet, posterior to the aorta, which seemed attached to the anterior left atrial wall. Note the thickened mitral valve leaflets.

The patient was started on warfarin. After 48 hours she presented with left hemiparesis. Echocardiography showed that the thrombus had disappeared. Right carotid ultrasound revealed the presence of a thromboembolus at the bifurcation of the internal and external carotid bifurcation. The thrombus was surgically removed.

Four weeks later she underwent mitral and tricuspid valve repair. No residual thrombus was seen in the left atrium. Postoperative course was favourable with the patient in NYHA grade I and a complete recovery from the hemiparesis eight weeks after surgery.

Left atrial ball thrombi are well described in adults with longstanding mitral stenosis and atrial fibrillation. Reports in paediatric patients are uncommon especially in the absence of atrial fibrillation. Despite reports of successful resolution with warfarin treatment, it may be preferable to submit these patients to urgent surgery for thrombus removal and mitral valve repair, because of the risk of systemic emboli.