ONLINE CASE REPORT

Multiple left atrial masses in a patient with breast cancer

Debjit Chatterjee

Author

Debjit Chatterjee Consultant Cardiologist

Queens Hospital, Belvedere Road, Burton on Trent, DE13 ORB

Correspondence to: Dr D Chatterjee (debjit.chatterjee@hotmail.com)

Key words

anticoagulation, cancer, mitral stenosis, multiple clots, surgery

doi: 10.5837/bjc.2017.024 Br J Cardiol 2017;**24**:(3) This is a rare case with dramatic image of multiple clot formation in the left atrium in a patient with mitral stenosis when anticoagulation was stopped for a few days before cancer surgery.

Case

A 63-year-old woman presented with breathlessness for a week. She had had a right mastectomy and axillary node clearance three weeks previously for breast cancer. She was known to have rheumatic heart disease and mitral stenosis with history of balloon mitral valvuloplasty 12 years ago. An echocardiogram, which was performed four months before, showed moderate mitral stenosis with valve area of 1.2 cm², moderate aortic stenosis with peak gradient across aortic valve of 42 mmHg and mean of 22 mmHg and mild tricuspid regurgitation with normal pulmonary artery pressure. She was also known to have permanent atrial fibrillation and was on warfarin for many years. This cancer was a recurrence of her original breast cancer diagnosed 15 years ago, for which she underwent wide local excision, chemotherapy and radiotherapy. Her warfarin was stopped five days before surgery and international normalised ratio (INR) on the day of operation was 1.3. She was not bridged with heparin/lowmolecular weight heparin (LMWH). Her warfarin was restarted with her usual dose after operation. Postoperatively, she developed pulmonary oedema and chest infection for which she was treated with an antibiotic and increased dose of diuretics. Ventillation/perfusion (V/Q) scan postoperatively was of low probability for pulmonary embolism. She went home one week after her breast operation and re-presented with breathlessness. Her INR was subtherapeutic for two weeks after the operation.

Chest X-ray on presentation was suggestive of pulmonary oedema and hence an echocardiogram was done for further evaluation (**figure 1**). The echocardiogram is available with online version of article.

Echocardiogram showed two echogenic masses of 3.8 \times 2.6 cm and 2.8 \times 1.6 cm in size in the left

Figure 1. Echocardiogram showing two echogenic masses in the left atrium



atrium (LA). One appeared to be attached to the septum and the other appeared to be almost freely floating, coming in and out of the left ventricular (LV) inflow causing obstruction. Her previous echocardiogram, done four months ago, was reviewed and there was no suggestion of any mass in the LA. Hence, these masses were thought to be LA clots. She was high risk for LA clots in view of rheumatic mitral stenosis and atrial fibrillation (AF), and the risk was increased because of cancer and the fact that her warfarin was stopped before surgery and she was not bridged with heparin/LMWH.

Her case was discussed with the cardiac surgical team and she was operated on on an emergency basis. Two large clots were removed from the LA and she had tissue mitral valve replacement, tissue aortic valve replacement, tricuspid valve repair and LA appendage occlusion. She recovered well from surgery and continues to do well a year after surgery

Acknowledgements

With thanks to Stephen Foster, Cardiac Physiologist; Priya Philip, Sister, Coronary Care Unit; Queens Hospital, Burton upon Trent.

Conflict of Interest

None declared.