Conclusion

E-learning can assist education in cardiovascular imaging and can complement traditional education techniques. It has a number of advantages, and it can supplement interaction with peers and with formal trainers. It is flexible in time and space, it can be widely available, and it is relatively cheap. Resources should be adapted to each intended audience and should be supplemented by techniques for both formative and summative assessment. We plan in future to assess the impact of EACVI educational programmes in clinical practice throughout Europe.

Conflict of interest: None declared.

References


Severe restrictive aortic regurgitation due to aortic fibrous strand

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A 70-year-old male was referred to the echo laboratory for a reevaluation. One year ago he suffered a traumatic tetraplegia. During the preoperative evaluation he was diagnosed with severe aortic regurgitation.

A transthoracic echocardiogram showed a tricuspid aortic valve with severe aortic regurgitation (Panel A). Aortic annulus and root were not dilated. Transoesophageal echocardiography showed a tricuspid aortic valve with normal opening movement and an adequate valve coaptation between right coronary and non-coronary cusps (Panel B). A linear mobile echo like a chordae tendineae strand was connecting the left coronary sigmoid cusp to the sinotubular junction (Panel C), leading an important tenting and restriction of this cusp (Panel D and E, see Supplementary data online, Video S1). Colour flow displayed a severe aortic regurgitation (Panel F, see Supplementary data online, Video S2). Live three-dimensional echocardiography was performed, improving the assessment of the fibrous strand (Panel G, see Supplementary data online, Video S3). Left ventricle was dilated and has a moderate dysfunction (ejection fraction 45%) with global hypokinesia.

The patient denied surgery

The aortic chordae tendineae strand may be an embryonic remnant during the semilunar cusp formation process of the aortic valve. There are few reported cases, most of them from Asia, describing aortic regurgitation due to spontaneous rupture of chordae tendineae. To our knowledge, there is only one case reported similar to ours, submitting an aortic valvular incompetence owing to this restrictive mechanism (fibrous strand) without another mechanism: annular dilatation, prolapse or any congenital heart defect.

Supplementary data are available at European Heart Journal – Cardiovascular Imaging online.