3D TEE: Added Value
“Real Life Cases”

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Infective Endocarditis

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Two Masses  Single Horse-shoe Mass
OBSTRUCTED PROSTHETIC VALVES

CASE

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CASE

28 years female
Tissue Prosthesis 2012

Progressive Dyspnoea

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Peak Diastolic Velocity 2.6 m/sec, MDG = 18 mmHg
Effective Orifice Area = 0.7 cm²

CASE

Male 60 Years
Bioprosthesis 15 years ago

Progressive Dyspnea

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Case
Paravalvular Regurgitation.

CASES

MITRAL VALVE PROLAPSE

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The prevalence and impact of deep clefts in the mitral leaflets in mitral valve prolapse

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Aims

Deep clefts are a cause of early failure of mitral valve repair, but it is not known whether clefts represent normal morphology, or whether they occur more frequently in mitral valve prolapse (MVP).

Methods and results

Deep clefts were defined as indentations extending >50% of the depth of the mitral valve leaflet. Using trans-oesophageal echo (TOE), 3D zoom images were acquired of the mitral valve in 17% patients: 76 patients with MVP, 43 patients with alternative causes of mitral regurgitation (MR), and 57 controls. Three-dimensional TOE results were corroborated with findings made at surgery for a subset of patients who subsequently underwent mitral valve surgery. An assessment of the proportion of the valve that was prolapsing was documented, and correlated to the number of clefts. The relationship of clefts to the region of prolapse or flail was recorded. Three-dimensional TOE was 93% sensitive and 92% specific for detecting clefts. Clefts were documented in 8% of patients with MVP, but significantly less frequently in patients with alternative MR (16% P < 0.001) and controls (12% P < 0.001). Clefts always appear in prolapsing regions or framing them, and the number of clefts increased in patients with more extensive prolapse.

Conclusion

Clefts are frequently seen in MVP, but are uncommon in patients without this diagnosis. They occur in greater numbers as a larger proportion of the valve prolapses. They may play an important role in the development of MVP.

Keywords

Mitrval valve prolapse + 3D TOE + Cardiotoracic surgery

CASE

Right Atrial Shadow

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ASD
ASD Shape and Size
Left atrial Perspective

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