

Results We diagnosed a total of 301 VHDs with a large predominance of regurgitant lesions: 269 (89.3%) regurgitant VHDs and 32 (10.7%) stenotic VHDs. pTTE was highly sensitive (85.7%) and specific (97.9%) for screening VHD while auscultation detected only 54.1%. All significant VHDs (at least mild severity) were detected by pTTE. All aortic and mitral regurgitations not detected by pTTE were trivial regurgitations and concerned patients with a poor echogenicity.

Conclusion pTTE is reliable for screening significant VHD and should be proposed as a new screening tool. (Fig. 1)

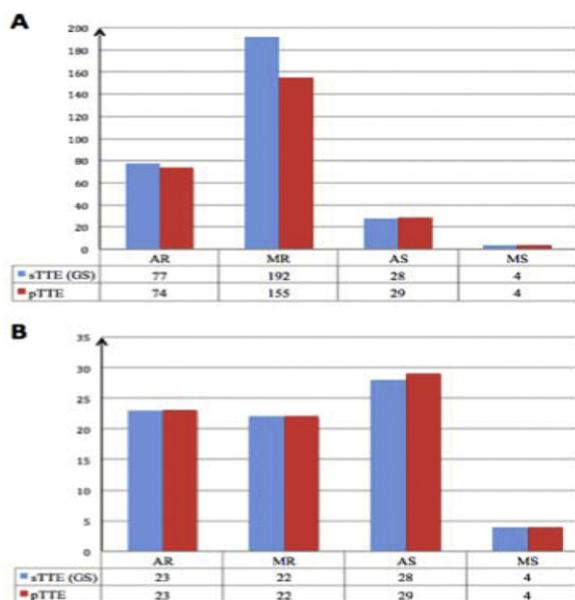


Fig. 1 A. Valvular heart disease (VHD) diagnosed by standard transthoracic echocardiography (sTTE) and by pocket-sized transthoracic echocardiography (pTTE). B. Significant VHD (exclusion of trivial regurgitations) diagnosed by sTTE and pTTE.

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Poster n°38

Paradoxical restricted motion in diastole is a frequent finding in mitral valve prolapse/dystrophy patients

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Introduction Filamin-A mitral valve prolapse/dystrophy (FLNA-MVP) phenotype associates moderate MVP and a paradoxical restricted motion in diastole. We aim to assess the association of MVP with restricted motion in diastole in MVP patients (restricted MVP).

Method We prospectively enrolled 475 MVP probands (64 ± 13 years). Patients underwent a clinical examination and a comprehensive echocardiographic analysis of mitral valve apparatus.

Results Among the 475 probands, 48 (101%, 95% CI 7.7–13.3) had both a MVP and a doming aspect in diastole. Patients with restricted MVP exhibited shorter chordae tendinae, and a shorter distance between papillary muscle tip and mitral annulus. Compared with controls, mitral valve leaflets were lengthened, thickened and mitral valve annulus was enlarged. The prevalence of polyvalvular disease and bicuspid aortic valve was not increased in restricted

MVP patients compared with conventional MVP. Familial form of restricted MVP was identified even in the absence of Filamin-A mutation.

Conclusion Restricted MVP is a quite frequent finding in MVP patients and is associated with unique features of the MV apparatus. Restricted MVP can be regarded as a third type of MVP beside myxomatous Barlow disease and fibro-elastic deficiency MVP.

Disclosure of interest The authors have not supplied their declaration of competing interest.

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Poster n°39

Reproducibility of transthoracic echo-doppler parameters to assess mitral regurgitation severity. Insights from a French multicentric study

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Introduction We aimed to investigate the interobserver agreement of parameters used in daily practice to quantify mitral regurgitation (MR) severity assessed by both junior and senior physicians to find the most reliable parameter according to the mechanism of MR and physician experience.

Method Complete MR evaluation of 25 consecutive patients were assessed by transthoracic echocardiography in 8 French tertiary public and private hospitals by 16 physicians (1 junior and 1 senior in each center). Hence, 400 analysis per parameter have been obtained.

Results The overall interobserver agreement for effective regurgitant orifice area (EROA) and regurgitant volume (RV) was only moderate, lower in secondary MR. Interobserver agreement was better in the senior group than in the junior group regarding parameters used to quantify MR severity, i.e. EROA, respectively substantial (0.61, 95% CI:0.45–0.75) and fair (0.33, 95% CI:0.19–.51) and RV with the PISA method, respectively moderate (0.50, 95% CI:0.33–0.56) and fair (0.36, 95% CI:0.36–0.43) (Fig. 1). Finally, using a multiparametric approach, the overall interobserver agreement for grading MR severity was fair (0.30), slightly better in the senior group than the junior group (respectively 0.31 vs. 0.28) with a substantial or almost perfect agreement more frequently observed in the senior group than in the junior group (respectively 52% vs. 36%).

Conclusion The use of quantitative parameters to assess MR severity was moderately reliable in daily practice, even in case of multiparametric approach. The experience of the physician and the mechanism of the MR impact interobserver agreement, paving the way for a better learning of this valvular disease and for the use of multimodality imaging in case of complex or secondary MR (Fig. 1).

Disclosure of interest The authors declare that they have no competing interest.