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)

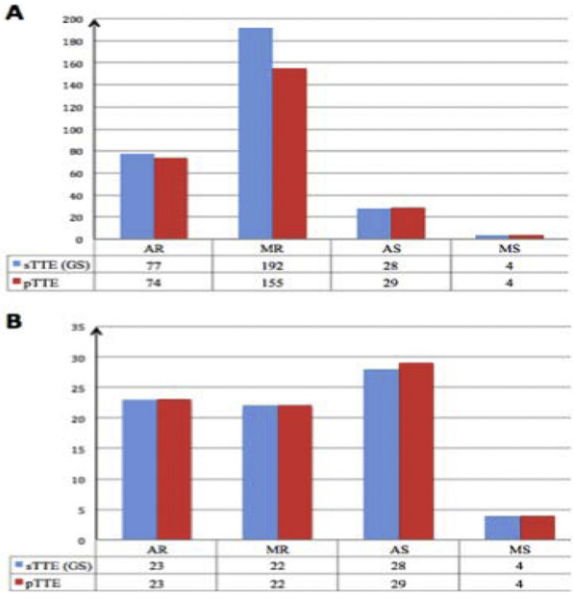

Fig. 1 A. Valvular heart disease (VHD) diagnosed by standard transthoracic echocardiography (sTTE) and by pocket-sized transthoracic echocarography (pTTE). B. Significant VHD (exclusion of trivial regurgitations) diagnosed by sTTE and pTTE.

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

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Poster n°38

Paradoxycal 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 tendinaes, 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.

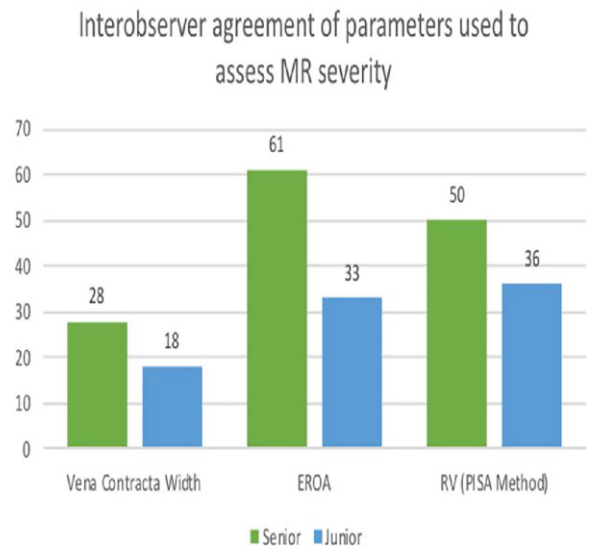

Fig. 1

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Poster n°40

Acute left ventricular mechanics changes after TAVR: The afterload concept revisited

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Introduction Recent studies have emphasized the prognostic value of mild left ventricular ejection fraction (LVEF) impairment in severe aortic stenosis. However, despite adaptive mechanisms to pressure overload, subtle impaired systolic function could be worsened by increased after load and partly reversible immediately after its correction. The aim was to evaluate the short terms effects of transcatheter aortic valve replacement (TAVR) on LV systolic function assessed by global longitudinal strain (GLS). We hypothesized that abrupt decrease of LV after load after TAVR could lead to immediate improvement of LV systolic function.
Method Patients referred to our Department for TAVR were included from January 2018 to July 2018 in this observational prospective single center study. Transthoracic echocardiography (TTE) was performed immediately before and 1—5 days after TAVR by the same operator and reviewed in a blind fashion.
Results Thirty-five symptomatic patients with severe aortic stenosis referred for TAVR (age 84 ± 5 y, 18 male, NYHA 2-3, orifice area 0.7 ± 0.2 cm^2, LVEF 66 ± 13%, GLS - 15.1 ± 4.7%) were included. Only 9/35 (26%) had a LVEF ≤ 60%. Overall, no significant change in LVEF (65 ± 14%; $P = 0.55$) or GLS (−16.1 ± 4.8%; $P = 0.11$) occurred immediately after TAVR despite a dramatic decrease in transoartic mean pressure gradient (44 ± 15 mm Hg versus 6 ± 3 mmHg; $P < 0.0001$). However in the subgroup of patients with LVEF ≤ 60%, a significant increase in GLS after TAVR was observed (−9.6 ± 4.1% versus −12.1 ± 3.3%; $P = 0.0039$).
Conclusion Following TAVR, an early improvement in LV systolic function assessed by GLS was observed only in patients with pre-existing mild LV systolic dysfunction. Further studies should evaluate whether this improvement is associated with better long term outcome.

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

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Poster n°41

Pericardial effusion in infective endocarditis: A Tunisian cohort

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Introduction Pericardial effusion (PE) is a frequent finding in the setting of infective endocarditis and is widely believed to signify more advanced infective endocarditis (IE) and generally worst outcomes. Our study aimed to identify clinical characteristics and outcomes of patients who had pericardial effusion.
Method This was a prospective study which included all patients diagnosed with infective endocarditis (IE) and hospitalized in the cardiology department of Monastir hospital, Tunisia, between 1983 and 2017. We included patients who were diagnosed with definite infective endocarditis based on the modified Ducke criteria.
Results Three hundred forty patients were included in this study. The mean age of the patients was 37 ± 17.92 years; 56.4% men and 33% had rheumatic heart disease. Pericardial effusion was observed in 6.35% of patients, most of them being mild or moderate (93.6%). Pericardial effusion was frequent in young patient. The presence of pericardial effusion was associated with a higher risk of heart failure during admission (60% vs. 32%, $P = 0.05$). Patients with pericardial effusion had a higher rate of early surgery (23.3% vs. 3.6%; $P = 0.02$) also. Despite these findings, the presence of pericardial effusion was not associated with a higher in-hospital or one-year mortality (16% vs. 21%; $P = 0.2$ and 25% vs. 37.3%; $P = 0.70$ respectively).
Conclusion Pericardial Effusion was not an independent predictor of mortality. Its presence is associated with the development of heart failure during hospitalization, frequent surgery, probably reflecting indirectly mechanical complication.
Disclosure of interest The authors have not supplied their declaration of competing interest.

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Poster n°42

Infective endocarditis: A changing epidemiological profile over the years: A prospective cohort study

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Introduction Epidemiological features of infective endocarditis have changed during the last decades because of an increase in degenerative valvular disease in the elderly, placement of prosthetic valves, and exposure to invasive procedures. Although lower mortality rates have been observed over the last decades, overall mortality remains high.
Method This was a prospective study which included all patients diagnosed with infective endocarditis (IE) and hospitalized in the cardiology department of Monastir hospital between 1983 and 2017. We included patients who were diagnosed with definite infective