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Left atrial function by speckle tracking echocardiography in HFpEF

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AIMS. None of the conventional echocardiographic parameters alone predict increased NTproBNP level and symptoms, making diagnosis of heart failure with preserved ejection fraction (HFpEF) very difficult in some cases, in resting condition.

We will evaluate LA functions by 2D speckle tracking echocardiography (STE) on top of conventional parameters in HFpEF and preHF patients with diastolic dysfunction (DD), in order to establish the added value of the LA deformation parameters in the diagnosis of HFpEF.

METHODS. We will enroll patients with HFpEF and compare them with asymptomatic patients with similar risk factors with DD (preHF). We will evaluate them by NTproBNP, conventional DD parameters, and STE. Global longitudinal strain (GS) was added. LA reservoir (R), conduit (C), and pump function (CT) were assessed both by volumetric and STE. 2 reservoir strain (S) derived indices were also measured, stiffness (SI) and distensibility index (DI).

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