heart failure (ADHF) from other syndroms. Our aim was to get insights into the pathophysiological conditions leading to altered expression of QSOX1 through the use of HF model rats.

Methods: Using thoracic aortic constriction (TAC), a model that rapidly progresses from cardiac hypertrophy to AHF as shown by echocardiographic and anatomical data, we analyzed the level of QSOX1 transcript, mRNA expression was measured by RT-qPCR and that of proteins by Western-Blot.

Results: QSOX1 mRNAs were up-regulated (x4; p=0.05) in the LV of TAC animals at 12 days post surgery, together with depressed LV shortening fraction. BNP mRNAs show an earlier rise (x2.1; p=0.05), at 4.5 days post surgery, QSOX1 mRNA level was also up-regulated in the left atria (x2.1; p=0.05). 56 days after surgery, the time when LA hypertrophy is apparent and AHF is truly developed. Of note all other tissues, so far tested (liver, kidney, skeletal muscle, lung), expressed similar QSOX1 level whatever groups and time after surgery.

Furthermore unaltered QSOX1 expression was noticed in chronic HF cardiac tissues (with ejection fraction <30%) whereas BNP was elevated (x2.8; p=0.03). Thus data in human plasma that links QSOX1 to the A1H pathogenesis are corroborated in the animal models showing QSOX1 induction in both the LV and the LA in AHF rats associated with severe pulmonary congestion.

Conclusion: Studies in rat models show that QSOX1 expression is induced as a result of pressure overload leading to heart failure. We propose QSOX1 as a new marker for aid in diagnosis of AHF patients.

The effect of bisoprolol on right ventricular function in a cohort of 60 patients with chronic heart failure

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Beta-blocker use improves left ventricular ejection fraction (LVEF) in patients with heart failure. A similar effect of beta-blockers on right ventricular function has not been assessed.

This study investigated the short-term effect of Bisoprolol on right ventricular function in chronic heart failure patients. A cohort of 60 heart failure patients who were not taking beta-blockers at baseline was studied prospectively. Right ventricular ejection fraction (RVEF) and LVEF were measured at both baseline and 6 months by echocardiography. Various parameters of the right ventricular function were measured: Simpson RVEF, surface shortening fraction, right ventricular outflow tract (RVOT %), TAPSE (mm), S’ wave with tissue doppler (S’ di/dcm/s), and the Tei index. The threshold of significativity was fixed at 5%. Bisoprolol was up-titrated during six months by a preestablished protocol to a target dose of 10 mg/ Od. Mean age was 65.7±16.3 years. Baseline RVEF was 25.6±5.2% and baseline LVEF was 20.8±6.4%. Mean Bisoprolol dose reached was 25±12.5 mg daily. At 6 months, RVEF was significantly increased by 7.5% (95% confidence interval, 3.9-10.2; p=0.0001) and LVEF also increased significantly by 7.5% (95% confidence interval, 4.0-11.9%; p=0.0003). All the parameters of the right ventricular function were significantly improved.

TAPSE (15.5 vs 12.7; p=0.078), Doppler S’ di/dcm/s (10.7 vs 8.2; p=0.002), tei index (54.10vs81.45; p=0.0008), RVOT% (27.1 vs 19.3; p=0.036), dp/dt RV (721vs505; p=0.05).

The efficacy and good tolerance of bisoprolol is demonstrated in this study on chronic heart failure with right ventricular dysfunction when administered in a precise pattern

Emergency extra-corporeal membrane oxygenation in cardiac shock and cardiac arrest in hospital without on-site cardiac surgical facilities

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Purpose: Emergency extra-corporeal membrane oxygenation (ECMO) implantation for severe cardiac shock or refractory cardiac arrest (under car-