TRICUSPID REGURGITATION IS AN INDEPENDENT PREDICTOR OF FAILURE OF AV NODE ABLATION

Introduction: AV nodal (AVN) ablation is sometimes needed to control ventricular rate and/or to optimize biventricular pacing (BiVP) in patients with atrial tachyarrhythmias (Afa). Limited data is available on the predictors of failure of AV nodal ablation.

Methods: We performed a retrospective study including all consecutive patients undergoing AVN ablation. Procedure failure was defined as resumption of AVN conduction resulting in recurrence of either rapid ventricular response or suboptimal BiVP.

Results: 247 consecutive patients undergoing AVN ablation for Afa at our center were included in the study. Mean age was 71 ±12 years with 54% females. 136 (55%) patients had a pre-existing device. A long sheath was used in 74 (30%) patients. 11 (4.5%) patients had a procedure failure (2 did not achieve AVN block during the procedure). There were no differences in the baseline characteristics and catheters used between patients with or without failure. Patients with moderate to severe tricuspid regurgitation (TR) were much more likely to have procedure failure (11% vs 2%; p=0.002). In multivariate regression analysis moderate to severe TR was confirmed to be the only independent predictor of failure (OR 5.5; p=0.017). All 11 patients with clinical failure had a successful re-do procedure with 2 patients requiring ablation from the left side.

Conclusion: Failure of AVN ablation procedure is low. Moderate to severe TR is an independent predictor of procedure failure.