

Does General Anaesthesia Improve Outcome of Slow Pathway Ablation for AVNRT?

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Background: Ablation catheter stability plays an important role in the success and safety of slow pathway (SP) ablation for AVNRT. General anaesthesia (GA) may enhance catheter stability by preventing patient movement and allowing periods of apnoea without diaphragmatic motion. We report the impact of GA on acute and long term outcomes in a large single centre consecutive series of pts undergoing slow pathway ablation for AVNRT.

Methods: The study included 1448 consecutive procedures in 1419 patients with AVNRT (mean age 49±17 years, 66% women) who underwent SP ablation using a combined electrophysiologic and anatomic approach. Univariate and multivariate analysis was performed for potential predictors of immediate success and late recurrence.

Results: GA was used in 33.6% of patients. They were significantly younger (44±19 vs. 51±16, p<0.0001) and more frequently female (68.7% vs. 64.8%, p=0.07). Acute ablation success was achieved in 98.1% of all pts. Varying degrees of transient AV block occurred during the procedure in 20/1448 (1.4%) pts but none had persistent CHB. Of the 1391 patients with successful ablation, 22 pts (1.5%) developed AVNRT recurrence during a follow-up period of 63±38 months. The only independent predictor of reduced procedural success was the presence of atypical AVNRT (hazard ratio 3.1, p=0.04). Independent predictors of AVNRT recurrence were age < 20 years and female gender (hazard ratios 14.1 and 3.7, respectively). No significant difference in the incidence of acute procedural failure (hazard ratio 0.67, p=0.36), late recurrence (hazard ratio 1.41, p=0.43) or transient AV block was observed in patients with or without GA.

Conclusions: This study demonstrates in a large consecutive single centre series that slow pathway ablation using RF energy is a highly effective procedure with an extremely low risk of inadvertent AV block and a low recurrence rate. There was no evidence that SP ablation under GA provides better or safer outcomes.