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Titel des Beitrags: Acute and long-term results of radiofrequency ablation of common atrial flutter and the influence of the right atrial isthmus ablation on the occurrence of atrial fibrillation.

Abstract: AIMS: The purpose of this study was to evaluate the acute success rate and long-term efficacy of radiofrequency ablation of common type atrial flutter (AFL) by using a standardised anatomical approach in a large series of patients and to assess the influence of right atrial isthmus ablation on the occurrence of atrial fibrillation. There are no large scale prospective or retrospective multicentre studies for radiofrequency ablation of AFL.

METHODS AND RESULTS: The study population consisted of 363 consecutive patients with AFL (mean age 58+/−16 years, 265 men) who underwent radiofrequency ablation at the inferior vena cava-tricuspid annulus (IVC-TA) isthmus using a standardised anatomic approach. Bidirectional isthmus block at the IVC-TA was achieved in 328 patients (90%). Following radiofrequency ablation, 343 patients (95%) were followed for a mean of 496+/−335 days. During the follow-up period, 310 patients (90%) remained free of AFL recurrences. Multivariate analysis identified five independent predictors of AFL recurrence: fluoroscopy time (p<0.001), atrial fibrillation after AFL ablation (p=0.01), lack of bidirectional block (p=0.02), reduced left ventricular function (p=0.035) and right atrial dimensions (p=0.046). Atrial fibrillation occurrence was significantly reduced after AFL ablation (112 in 343 patients, 33%) as compared to
occurrence of atrial fibrillation before radiofrequency ablation (198 in 363 patients, 55%, p<0.001). CONCLUSIONS: The current anatomical ablation approach for AFL and criteria for evaluation of the IVC-TA isthmus block is associated with an acute success rate of 90% and a long-term recurrence rate of 10%. Radiofrequency ablation of common AFL results in a significant reduction in the occurrence of atrial fibrillation.