

**OLDER AGE SHOULD NOT ALWAYS STAND FOR CONSERVATIVE MANAGEMENT: LEFT ATRIAL FIBROSIS IN ELDERLY PATIENTS WITH ATRIAL FIBRILLATION**

Poster Contributions

Poster Area, South Hall A1

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Authors: *Christian Mahnkopf, Marcel Mitlacher, Johannes Brachmann, Klinikum Coburg, Dept. of Cardiology, Coburg, Germany*

**Background:** Left atrial fibrosis (LA fibrosis) detected using Late-Gadolinium Enhancement MRI (LGE-MRI) has been introduced as a strong independent predictor for success of pulmonary vein isolation (PVI) in patients with atrial fibrillation (AFIB). Due to demographic change, more and more elderly symptomatic AFIB patients must be treated in clinical routine. Aims: The aim of this study was to determine the degree of LA fibrosis using LGE-MRI and to compare the extent of LA fibrosis in young and older patients with AFIB.

**Methods and Results:** A total of 214 (126 male, 62.7±10.5) consecutively patients with AFIB underwent LGE-MRI to assess for LA-Fibrosis. Each LGE-MRI was segmented by isolation the LA wall and quantified for the relative extent of fibrotic remodeling using the Corview software (Marrek Inc.). Patients were placed in four staging categories based on the degree of LA fibrosis: Utah I (<10% fibrosis), Utah II (≥10% to 20%), Utah III (≥20% to 30%) and Utah IV (≥30%). Furthermore, patients were divided into two groups depending on their age; A: 75 years and the distribution in the different Utah stages were analyzed.

**Results:** In the entire cohort 40 patients (18.7%) were found in Utah I, 109 patients (50.9%) in Utah II, 53 patients (24.8%) in Utah III and 12 patients (5.6%) in Utah IV. In the group 75 years old was statistically comparable as 1 patient (4.2%) was found in Utah I, 14 patients (58.3%) in Utah II, 6 patients (25%) in Utah III and 3 patients (12%) in Utah IV (p= n.s.). The majority of patients in both groups were found in early stages of left atrial remodeling (Utah I [Unsupported Character - Codename &I;]) 69.47% vs 62.5%, p= 0.491).

**Conclusions:** The distribution of the degree of LA-fibrosis in elderly AFIB patients is comparable to those of younger patients. Therefore, a conservative approach should not automatically recommend in elderly patients. Assessment of the LA using LGE-MRI allows the choice of a adequate therapy, regardless of age and should be recommend in all patients with AFIB.