Safety of Percutaneous Left Atrial Appendage Occlusion in Patients with Atrial Fibrillation after Acute Coronary Syndrome: A Single Center Experience

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Aims: In patients with atrial fibrillation (AF) and indication to Dual Antiplatelet Therapy (DAPT) for Acute Coronary Syndrome (ACS), triple therapy is recommended. However, this issue is still largely debated. Percutaneous Left Atrial Appendage (LAA) occlusion may represent an alternative therapeutic approach in this subset of patients, as it could lead to a reduction in the incidence of bleeding. Nevertheless, due to lack of clinical evidence, this approach does not represent the gold standard treatment for these patients. The objective of this study is to evaluate the safety of percutaneous LAA occlusion in patients with Atrial Fibrillation and indication of concomitant DAPT for ACS. Methods and Results: Fifteen AF-patients with indications to anticoagulant and DAPT after ACS underwent LAA occlusion with Amplatzer Cardiac Plug (ACP) or Amulet ACP (St. Jude) from October 2014 to May 2016. Procedural success was achieved in 14/15 patients, while in 1 patient a clinically non-relevant pericardial effusion was registered before the trans-septal puncture, without implantation of the device. No peri-procedural death, major bleeding and dislocation or thrombi of the device were recorded. During a median follow-up of 182 days (interquartile range [IQR]: 169 to 183 days), one periprocedural minor bleeding and two non cardiovascular death were described. Conclusions: LAA occlusion represents a relatively safe procedure for patients with atrial fibrillation and the need of DAPT due to ACS. Randomized trials should be designed to evaluate the efficacy and safety of this procedure in this clinical setting.