

P996

Early experience of transnasal micro-transesophageal echocardiography to guide left atrium appendage closure under conscious sedation

E. Couture, A. Darmon, G. Stein, I. Platonov, V. Brennt, J. Horvilleur, B. Chevalier, P. Garot

Ramsay Générale de Santé - Institut Cardiovasculaire Paris Sud, Massy, France

Introduction: Percutaneous left atrial appendage closure (LAAC) is typically performed utilizing transesophageal echocardiography (TEE) and fluoroscopy under general anesthesia (GA) or intracardiac echocardiography (ICE) under conscious sedation. Transnasal microtransesophageal echocardiography (micro-TEE) is a recently described technique to guide structural heart interventions eliminating the need for GA, which is beneficial for all, especially older patients. In this series, we report our initial experience with this novel technique to guide LAAC.

Methods and results: Between June 2018 and January 2019, we performed 30 consecutive LAAC (mean age 80,2 years old) with the Amplatzer AMULET in whom we considered using transnasal micro-TEE under conscious sedation instead of TEE under GA. All patients had a CT prior to the procedure to assess anatomy suitability and to rule out thrombus as well as a follow-up CT performed at 3 months post-LAAC to confirm complete sealing. Three patients had TEE instead of micro-TEE for various reasons (patient preference, cognitive impairment, INR >2). We

observed one cross-over to TEE+GA because of a failed esophageal intubation under conscious sedation. Device implantation success rate was 100%. Imaging quality was quoted either good or excellent in 25 of the 26 patients with the remaining being quoted as suboptimal. Patient tolerance was either good or excellent in 24 of the 26 cases. There were five epistaxis noticed, one requiring nasal packing. No device embolization, no significant peri-device leak, no tamponade occurred in any patient during this period. At 3 months, there was no prosthesis thrombosis observed and 23% (6/26) had partial opacification of the LAA behind the prosthesis.

Conclusion: In this series, transnasal micro-TEE was feasible, safe, well tolerated and provided sufficient imaging quality to guide LAAC with the Amplatzer AMULET under conscious sedation. The cheaper cost and the wider field of view of micro-TEE over ICE are potential advantages that could impact the organization of LAAC programs especially when these interventions are planned in the elderly in whom GA carries a significant risk.