Left atrial appendage closure in the presence of thrombus: incidence, technique and outcomes

Fontenla Cerezuela A.; Gomez-Blazquez I.; Corros C.; Rodriguez D.; Borrego-Bernabe L.; Marco Del Castillo A.; Ramos-Jimenez J.; Solis J.; Sarnago F.; Lopez-Gil M.; Bueno H.; Salguero R.; Arribas F.

University Hospital 12 de Octubre, Madrid, Spain

Funding Acknowledgements: Type of funding sources: None.

Background

Patients with left atrial appendage (LAA) thrombus are excluded for LAA occlusion (LAAO) in clinical trials. However, some of them may require this therapy due to repeated thromboembolisms despite accurate anticoagulation.

Aim: The aim of the study is to describe the prevalence of LAA thrombosis in patients submitted for LAAO in a high-volume center of LAAO procedures, explaining the employed technique and results in this scenario.

Methods

Single-center retrospective analysis including all consecutive patients referred for LAAO.

Results

LAA thrombus was detected by TEE in 8/76 patients referred for LAAO (10.5%). Five of them underwent LAAO despite the presence of thrombus due to clinical conditions. All the procedures were successfully performed with Amulet devices (Table). The following preventive measures were putting in place during the implants: avoidance of contrast injection into the LAA during the procedure (non-touch technique), TEE measure for device size election; and TEE device deployment guidance with special care to the the sheath orientation and depth enabling a slow and single implant of the device partially released in the LAA before complete implantation at the entrance of the LAA (Figure. A&B: Large LAA thrombus partially occupying the landing zone. C: Thrombus sealed by LAAO device. D&E: Non-touch technique: echo-guided progressive deployment of the LAAO device without thrombus shifting). No cerebral protection devices were used. TEE performed one month after the procedure ruled out the presence of residual thrombi or leaks in all cases. There were no events after a median follow-up of 17.1 months (range: 32.3-1.1)

Conclusion: LAAO in patient with LAA thrombus can be effectively and safely performed, in high-volume centers and with an accurate technique, under accurate TEE guidance.

Abstract Figure. LAA thrombus and occlusion technique