PFO Closure with Atrial Septal Aneurysm and Migraine Headaches

A 55 year old woman was diagnosed in the Neurology Department of the Oswiecim Hospital for dysopsia as well as suffering of severe migraine headaches most of her adult life.

Head CT proved numerous ischemic focuses in temporal and occipital lobe of left cerebral hemisphere and left cerebellum hemisphere. Searching for possible causes of brain infarction carotid and intracranial Doppler as well as Angio-CT of carotid and intra-cranial arteries were performed within norm results. All metabolic disorders were ruled out.

The patient was admitted to the Cardiology Department of the Medical University of Silesia for cardiologic diagnosis of the above mentioned symptoms. An electrocardiogram (ECG) showed atrial sinus rhythm and right atrial enlargement. A transthoracic 2-dimensional (2-D) Doppler echocardiogram did not reveal any pathology.

TEE excluded any valvular disorders, echogenic blood in either atria, and other possible causes of cardiac embolisation. A Patent Foramen Ovale (PFO) was observed along with an atrial septal aneurysm with amplitude of over 15mm.

Patient was selected for Percutaneous closure of her PFO. Considering the very large aneurysm it was decided to close the defect and cover the aneurysm with a Cardia – Intrasept 30mm PFO occluder. (Cardia© Inc., Eagan, MN USA) The device was implanted under fluoroscopy and TEE without event. Control TEE performed one week post implant with proper device location and no shunt.

Control TEE after 6 months confirmed a good long term result and procedural success with No Migraine attacks.

Conclusion:
Closure of PFO with extremely large atrial septal aneurysm (ASA) can be performed successfully with the Intrasept device.