Duration Of Dual Antiplatelet Therapy And Stent-Adjacent Stenosis After Intracranial Venous Stenting

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Disclosures

• No disclosures.
Introduction

• Stent-adjacent stenosis (SAS) is a common late complication that occurs following intracranial venous stenting (IVS) for venous sinus stenosis (VSS). In this study, we compare the length of dual antiplatelet therapy (DAPT) and SAS rates in patients with idiopathic intracranial hypertension (IIH).
Methods

• We retrospectively collected data on consecutive patients with IIH admitted to our department who underwent IVS for VSS from Nov 2014–Sept 2019. All patients were treated with DAPT (ASA 325mg + Clopidogrel 75mg) 7 days prior to the procedure, with Clopidogrel discontinued 6 months after the procedure. Response essays, P2Y12 reaction units (PRU), were used for Clopidogrel dosage adjustments.

• We then performed a literature review using PubMed (“IIH” + “VSS”) to identify case series or retrospective cohorts of patients treated with IVS between 2000-2018. SAS and hemorrhage rates were calculated and compared between the cohorts.
Results

- Among 199 patients from the literature dataset, 95% were female and ranging between 10-64 years of age. Patients were treated with DAPT (ASA 81-325mg + Clopidogrel 75-150mg) within 5 days prior to the procedure, and followed a median duration of Clopidogrel for 3 months [range 1-5 months] after the procedure.

- In our cohort of 44 patients, the majority were female (95%) ranging between 9-53 years of age, and 20% had Clopidogrel dosage adjustments based on the PRU results.

- A significant higher rate of SAS was found in the literature dataset compared to our cohort, with comparable systemic hemorrhage rates among the cohorts.
Discussion

• The duration of DAPT after intracranial stenting varies among interventionalists and across centers, typically ranging between 6 weeks and 3 months. At our institution, we routinely put patients on DAPT for 6 months.

• The 6-month DAPT allows to protect the patients from stent-adjacent stenosis, as the endothelization process is believed to be completed after 100 days from the procedure.

• Moreover, at our center, we adjust DAPT dosing guided by P2Y12 reaction units (PRU). This has led us to believe that perhaps dose of Plavix, or similar drugs, is more critical than ASA dose.
Summary Points

• A 6-month DAPT proves to be beneficial in preventing SAS after IVS while maintaining a low hemorrhage risk.

• Standardization of DAPT duration among practitioners and across centers may improve outcomes in patients undergoing intracranial stenting.