

O-069

CSF-VENOUS FISTULA TRANSVENOUS EMBOLIZATION: INCIDENCE OF ONYX MIGRATION AND SUGGESTION OF ONE-WAY FISTULA PHYSIOLOGY

¹C Michaelcheck*, ¹W Brinjikji, ¹P Cogswell, ¹J Benson, ²A Madhavan, ²J Verdoorn, ³J Cutsforth-Gregory, ¹I Mark. ¹Neuroradiology, Mayo Clinic, Rochester, MN; ²Radiology, Mayo Clinic, Rochester, MN; ³Neurology, Mayo Clinic, Rochester, MN

10.1136/jnis-2024-SNIS.69

Introduction Transvenous catheter Onyx (Ethylene vinyl alcohol copolymer) embolization is a new treatment option for CSF-venous fistulas (CVF), the most common cause of spontaneous intracranial hypotension.¹ CVF are abnormal connections between the thecal sac or nerve root sleeve and adjacent foraminal or epidural veins. Potential complications of CVF embolization including unintentional onyx migration into the lungs or subarachnoid space. The purpose of this study was the review post-procedure CT imaging of patients who have undergone transvenous embolization of CVF and evaluate the rate of pulmonary and subarachnoid onyx.

Method A retrospective analysis of 100 patients, 32 male, 68 female, mean age 59.2 years, in which post embolization CT were examined for onyx extravasation into the spine or lung. All patients received spinal venous embolization of CVF between 2020 and 2023 at Mayo Clinic Rochester.

Results Evaluation of post embolization CT of the cervical, thoracic, and lumbar spine, and lungs did not demonstrate any migration or extravasation of onyx.

Conclusion These findings provide valuable insight into the safety of transvenous onyx embolization of CVF. The lack of central reflux into the subarachnoid space suggests one-way CVF physiology.

REFERENCE

1. Brinjikji W, Madhavan A, Garza I, et al. Clinical and imaging outcomes of 100 patients with cerebrospinal fluid-venous fistulas treated by transvenous embolization. *J Neurointerv Surg*. Published online October 28, 2023. doi:10.1136/jnis-2023-021012.

Disclosures C. Michaelcheck: None. W. Brinjikji: None. P. Cogswell: None. J. Benson: None. A. Madhavan: None. J. Verdoorn: None. J. Cutsforth-Gregory: None. I. Mark: None.

O-070

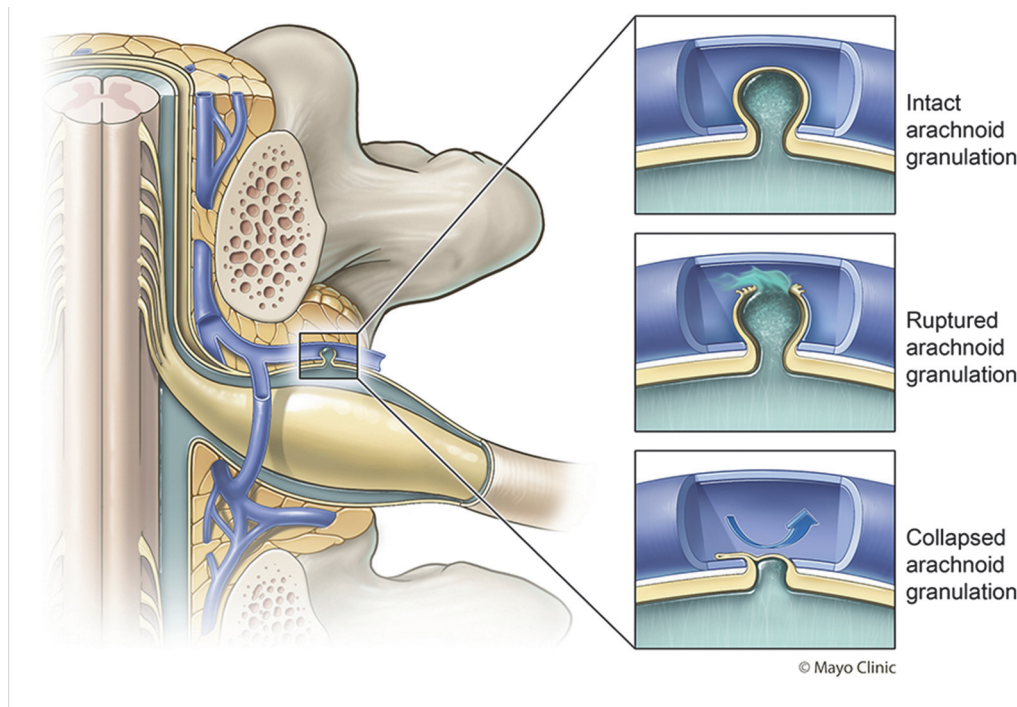
ASSESSING THE IMPACT OF RECREATIONAL DRUG USE ON ARTERIOVENOUS MALFORMATION RUPTURE RISK AND HOSPITAL OUTCOMES

¹A Gajjar*, ²K Gill, ³A Goyal, ¹A Behal, ¹A Custozzo, ¹A Boulos, ¹J Dalfino, ¹N Field, ¹A Paul. ¹Neurosurgery, Albany Medical College, Albany, NY; ²Orthopaedic Surgery, Massachusetts General Hospital, Boston, MA; ³Neurosurgery, Albany Medical Center, Albany, NY

10.1136/jnis-2024-SNIS.70

Introduction Recent literature highlights the adverse effects of recreational marijuana on aneurysm conditions. However, its impact on arteriovenous malformation (AVM) outcomes has not been explored. This study investigates the differences in AVM outcomes between marijuana users and non-users, focusing primarily on the likelihood of presenting with rupture and secondarily on the effects of other drugs on in-hospital mortality and complications.

Methods Utilizing the National Inpatient Sample from 2016 to 2020, we identified patients aged 18–89 with arteriovenous malformations. We compared the incidence of hospitalization and rupture between marijuana users and non-users, also



Abstract O-069 Figure 1