

ALERTA TEMÁTICA SELECTIVA: NEUROCIRUGÍA ENDOVASCULAR, ANEURISMA, FÍSTULAS



Manejo de aneurismas cerebrales: revisión de la literatura pasada, presente y futura / Management of cerebral aneurysms: Review of the past, present, and future literature

[Campos Gamarra, Rocio Nicole](#); [Astudillo Palacios, Mariana Gabriela](#); [Rojas Delgado, Gonzalo](#); [Gallo Guerrero, Marla](#); [Palacios García, Jimmy](#).

[Acta neurol. colomb.](#) ; 40(1): e4, ene.-mar. 2024.

Introducción:

El manejo de los aneurismas cerebrales ha ido evolucionando con el paso de los siglos, se busca evaluar el manejo médico, endovascular y quirúrgico de los aneurismas cerebrales rotos y no rotos a lo largo del tiempo, desde las primeras veces en que fueron tratados hasta las innovaciones que se están llevando a cabo. **Materiales y métodos:**

Se realizó una revisión de artículos buscados en la base de datos de PubMed, buscando "Mesh Terms" (o descriptores en ciencias de la salud) con palabras seleccionadas relacionadas al tema y también se seleccionaron artículos según el criterio de los autores; además de la extracción de datos en Rayyan.

[ENLACE A OTROS TÍTULOS BVS REGIONAL](#)

Integración de técnicas endovasculares en la práctica de neurocirugía abierta establecida: un análisis temporal de la evolución del tratamiento en una unidad de neurocirugía con formación dual
Integración de técnicas endovasculares en la práctica de la neurocirugía abierta: análisis temporal de la evolución del tratamiento en una unidad de neurocirugía vascular dual

Ignacio Arrese, Sergio García-García, Santiago Cepeda, Rosario Sarabia

Unidad de Neurocirugía Vascular, Hospital Universitario Río Hortega, Valladolid, España, 2024.

Objetivo

En Europa, las unidades con cirujanos neurovasculares con doble formación (DTNS, por sus siglas en inglés) capacitados tanto en neurocirugía abierta (ON, por sus siglas en inglés) como en neurocirugía endovascular (EN, por sus siglas en inglés) son escasas. Por ejemplo, en España, nuestra unidad es única dentro del sistema de salud público, donde todos los procedimientos neurovasculares son realizados por DTNS. Nuestro estudio tiene como objetivo evaluar la evolución en el tratamiento de los aneurismas intracraneales rotos (rICA, por sus siglas en inglés) y evaluar el impacto de esta evolución en los resultados clínicos.

[ENLACE A OTROS TÍTULOS SCIENCE DIRECT](#)





Revisión sistemática

Intervenciones para el tratamiento de las malformaciones arteriovenosas cerebrales en adultos

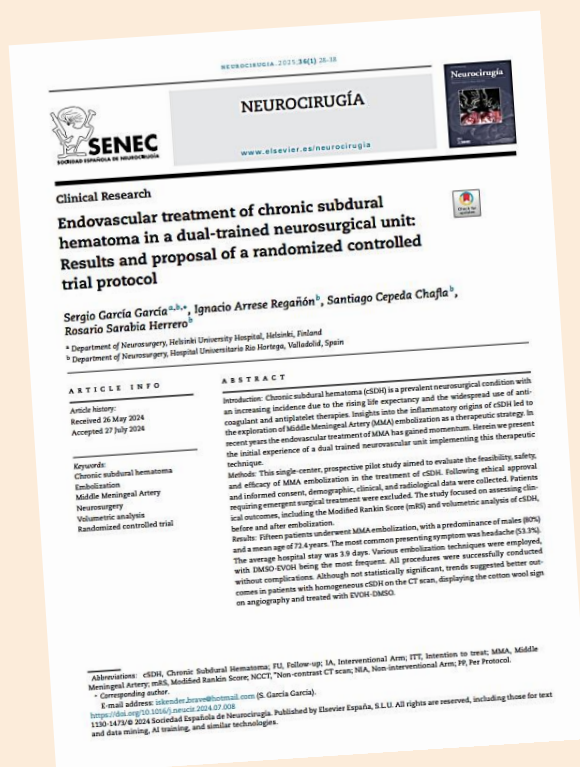
Susana M Zuurbier, Rustam Al-Shahi Salman

Declaraciones de interés de los autores 2019

Fondo

Las malformaciones arteriovenosas cerebrales (MAV) son la causa más frecuente de hemorragia intracerebral en adultos jóvenes. Las MAV cerebrales también causan convulsiones y déficits neurológicos focales (en ausencia de hemorragia, migraña o convulsión epiléptica); aproximadamente una quinta parte son descubrimientos incidentales. Se utilizan diversas intervenciones en un intento de erradicar las MAV cerebrales: escisión neuroquirúrgica, radiocirugía estereotáctica, embolización endovascular y combinaciones por etapas de estas intervenciones. Esta es una actualización de una revisión Cochrane publicada por primera vez en 2006 y actualizada por última vez en 2009.

[ENLACE A OTROS TÍTULOS COCHRANE \(formular búsqueda\)](#)



Artículo

Tratamiento endovascular del hematoma subdural crónico en una unidad neuroquirúrgica de formación dual: resultados y propuesta de un protocolo de ensayo controlado aleatorio | Tratamiento endovascular del hematoma subdural crónico en un servicio de neurocirugía con entrenamiento dual: resultados preliminares y propuesta de protocolo para un ensayo clínico aleatorio

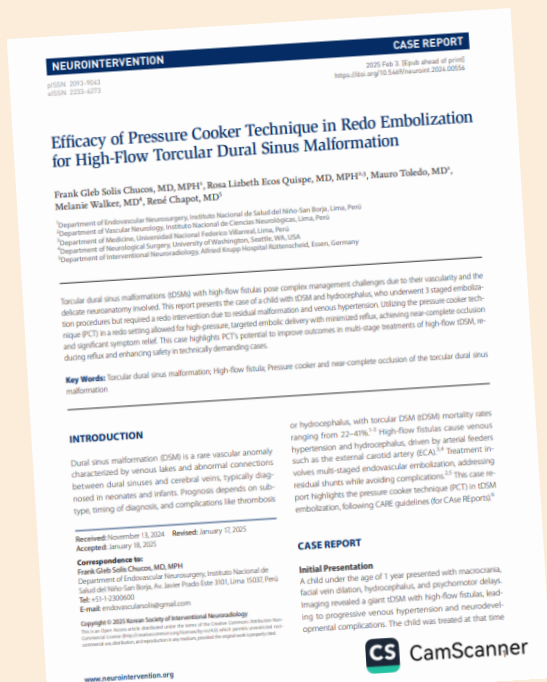
García García, S., Arrese Regañón, I., Cepeda Chaffla, S., Sarabia Herrero, R.

[Neurocirugía](#), 36(1), págs. 28–38, 2025

Introducción:

El hematoma subdural crónico (HSCc) es una enfermedad neuroquirúrgica prevalente con una incidencia creciente debido a la creciente expectativa de vida y al uso generalizado de terapias anticoagulantes y antiplaquetarias. Los conocimientos sobre los orígenes inflamatorios del HSCc llevaron a la exploración de la embolización de la arteria menígea media (AMM) como estrategia terapéutica.

[ENLACE A OTROS TÍTULOS SCOPUS](#)



Case report

Efficacy of Pressure Cooker Technique in Redo Embolization for High-Flow Torcular Dural Sinus Malformation

Frank Gleb Solis Chucos, MD, MPH, Rosa Lizbeth Ecos Quispe, MD, MPH^{2,3}, Mauro Toledo, MD, Melanie Walker, MD, René Chapot, MD⁵

Neurointervention 2025;20: 32-36 (PubMed)

Torcular dural sinus malformations (tDSMs) with high-flow fistulas pose complex management challenges due to their vascularity and the delicate neuroanatomy involved. This report presents the case of a child with tDSM and hydrocephalus, who underwent 3 staged embolization procedures but required a redo intervention due to residual malformation and venous hypertension. Utilizing the pressure cooker technique (PCT) in a redo setting allowed for high-pressure, targeted embolic delivery with minimized reflux, achieving near-complete occlusion and significant symptom relief. This case highlights PCT's potential to improve outcomes in multi-stage treatments of high-flow tDSM, reducing reflux and enhancing safety in technically demanding cases.



Case report

Comprehensive Management of Intracranial Aneurysms in Rare and Variant Arterial Locations: A Detailed Case Report

Frank Solis, Rosa Ecos, Melanie Walker

Indian J Neurosurg, 2024 (ResearchGate)

Abstract

Aneurysms on variant arteries, especially involving the persistent trigeminal artery (PTA), azygos artery, and lenticulostriate arteries (LSAs), are rare. This report presents a case and subsequent management of a patient with multiple unruptured aneurysms arising from variant anatomical structures. A 48-year-old patient with a history of worsening headaches presented with three unruptured aneurysms at the PTA, azygos artery, and left LSA, confirmed via catheter angiography with three-dimensional reconstruction. Given the potential effects on conventional cerebrovascular structures, managing multiple aneurysms in rare and variant locations requires a tailored strategy. This case was successfully treated with an endovascular approach and a period of observation, emphasizing the need for individualized treatment planning.



Case report

Challenging Management of an Acute Traumatic Carotid-Cavernous Fistula in a 2-Year-Old Child with Literature Review

Frank Solis, Luis Macha, Mauro Toledo, Ricardo Gálvez,
Rosa Ecos

Indian J Neurosurg 2023;12:253–257. (Research Gate)

Abstract

Traumatic carotid-cavernous fistula (TCCF) is a rare occurrence in the pediatric population. However, the neurological sequelae of TCCF are associated with higher morbidity and mortality in pediatric patients. We report the case of a 2-year-old child with TCCF treated at a public hospital in Peru. The etiology of the injury was due to a fall of approximately 5 meters. The diagnosis was made based on the clinical picture and neuroimaging findings. The initial proposed treatment was performed with the hope of preserving the parent artery; however, due to persistence of the TCCF, embolization of the parent artery with coils and embolizing substance was performed. A literature review of similar cases was performed and identified eight cases in children under 10 years of age. Endovascular management of an acute TCCF is a challenge due to the high morbidity and mortality during the acute phase and can be complicated when other traumatic injuries are present. Maintaining the parent artery is important; however, when this is not possible, trapping the parent artery may provide an alternate option when appropriate collaterals exist.

Case Report

Failure of Reconstructive Technique to Repair a Giant Intracranial Fusiform Aneurysm of the Basilar Artery: Case Report and Literature Review in the Pediatric Population

Frank G. Solís, Mauro Toledo, Rosa L. Ecos

Indian / Neurosurg 2024; 13:150-155 (Research Gate)

Abstract

Treatment of giant basilar aneurysm presents a major treatment challenge, especially in the pediatric population. Morbidity and mortality approach 80 and 30%, respectively. Both reconstructive and deconstructive techniques are associated with high rates of complete occlusion and good neurological outcomes. We report a 14- year-old male with a giant basilar trunk aneurysm treated with an endovascular approach. Clinical symptoms began following an ischemic stroke 2 weeks prior to admission. Endovascular treatment was performed through a reconstructive technique by single flow diverter device (FDD) in the basilar artery; however, this technique failed. At 1-year follow-up, without additional endovascular treatment, the mid-basilar artery and aneurysm were occluded, with vertebrobasilar flow maintained through collaterals from the right posterior communicating artery. We present a challenging management of giant basilar aneurysm in a pediatric patient experiencing a failure of FDD deployment; however, we highlight the importance of collateral flow development in progressive occlusions.





PERÚ

Ministerio de Salud

Viceministerio de Prestaciones y Aseguramiento en Salud

Instituto Nacional de Ciencias Neurológicas



Flow Diversion for the Treatment of Intracranial Aneurysms in a Peruvian Cohort: Experiences from a Limited-Resource Setting and Barriers to Implementation

Frank Solís, Andres Plasencia, Sarah Wahlster, Melanie Walker, Michael R. Levitt, Rosa Ecos

World Neurosurgery 180: 79-85, diciembre 2023 (Science Direct)

INTRODUCTION The Flow Redirection Endoluminal Device (FRED) (MicroVention Inc., Aliso Viejo, California, USA), a type of intracranial stent, reduces blood flow to an aneurysm and facilitates vascular remodeling.^{1,2} Flow diverter devices (FDDs) such as FRED are a treatment for intracranial aneurysms. Although initially used for giant aneurysms, aneurysms with complex anatomy, or those who fail endovascular coiling,^{1,3,4} FDDs have emerged as a primary treatment modality for unruptured paraclinoid aneurysms.^{5,6} Appropriate patient selection is critical to minimize complications and reduce morbidity and mortality.^{1,2,7} Other brands approved and commonly used for the treatment of aneurysms⁷⁻⁹ include the Silk flow diverter (Balt Extrusion, Montmorency, France) and Pipeline Embolization Device (Medtronic, Irvine, California, USA).



Embolization for Perimedullary Arteriovenous Fistulae: Pioneering Experience in Peru

Andrés R. Plasencia, Frank G. Solís, Alejandro Santillán

Journal of Neurological Research and Therapy, Vol. 3, N° 4, 2021 (Open Access Pub)

Summary Background: Perimedullary arteriovenous fistulae, or type IV spinal cord arteriovenous malformations, are very rare and not well-known lesions. This paper aims to present our endovascular experience with these lesions. **Methods:** We report our experience with 4 patients with perimedullary arteriovenous fistulae, subtypes b and c (macrofistulae), exhibiting severe neurological impairment. The patients were treated with endovascular embolization. **Results:** Complete fistula eradication was achieved in all of them. One complication occurred. We discuss the natural history, pathophysiology, clinical presentation, prognosis and embolization techniques, along with the angiographic and clinical outcomes. **Conclusion:** Our experience with endovascular embolization as an upfront treatment allowed us to eradicate these lesions in a safe and effective way, arresting the clinical worsening and reversing partially or completely the neurological injury in most of our cases.