Giant Basilar Apex Aneurysm

Biventricular hydrocephalus caused by a Giant Basilar Apex Aneurysm (GBAA) is a rare finding that presents unique and challenging treatment decisions.

Setty et al., reported a case of GBAA causing a life-threatening biventricular hydrocephalus in which both the aneurysm and hydrocephalus were given definitive treatment through a staged, minimally invasive approach. An obtunded 82-year-old male was found to have biventricular hydrocephalus caused by an unruptured GBAA obstructing the foramina of Monro. The patient was treated via staged, minimally invasive technique that first involved endoscopic fenestration of the septum pellucidum to create communication between the lateral ventricles. A programmable ventriculo-peritoneal shunt was then placed with a high-pressure setting. The patient was then loaded with dual anti-platelet therapy prior to undergoing endovascular coiling of the GBAA with adjacent stenting of the Posterior Cerebral Artery. He remained on dual anti-platelet therapy and the shunt setting was lowered at the bedside to treat the hydrocephalus. At 6-month follow up, the patient had returned to his cognitive baseline, speaking fluently and appropriately. Biventricular hydrocephalus caused by a GBAA can successfully be treated in a minimally invasive fashion utilizing a combination of endoscopy and endovascular therapy, even when a stent-assisted coiling is needed [1)].

1)
Setty P, Volkov A, Richards B, Barrett R. Minimally Invasive Treatment of Biventricular Hydrocephalus Caused by a Giant Basilar Apex Aneurysm via a Staged Combination of Endoscopy and Endovascular Embolization: A Case Report. Turk Neurosurg. 2015;25(2):344-9. doi: 10.5137/1019-5149.JTN.10210-14.0. PubMed PMID: 26014027.