Onyx HD-500 Liquid Embolic Agent for the Embolization of Broad-Based Saccular Intracranial Aneurysms: A Case Study

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Abstract:
Over the years, many different techniques have been used to treat brain aneurysms. Traditionally, open surgery or craniotomy was required for aneurysm clipping, but since the mid 1980s the endovascular treatment of aneurysms has become increasingly popular. The mainstay of endovascular aneurysm treatment has been embolization with platinum coils (a.k.a. “coiling”). However, despite advances in endovascular techniques, such as balloon remodeling and intracranial stent placement, it remains difficult to achieve the complete and permanent occlusion of many broad-based saccular aneurysms. Onyx HD-500 (eV3 Neurovascular, Irvine, CA), a liquid embolic agent, is the latest Food and Drug Association-approved device to be used in attempt to overcome the challenge of occluding broad-based intracranial aneurysms. In this case study, we describe the clinical and procedural issues involved in the treatment of a patient with a large, symptomatic intracranial aneurysm using Onyx HD-500.