

Novel Neuroform intracranial Microdelivery Stent and Endovascular coiling used at the Neurovascular center of the CJW Neuroscience Center by Dr. Spinos to treat complex intracranial aneurysm.

Endovascular coiling is becoming an increasingly popular treatment for cerebral aneurysms. It has a lower complication rate (3.7%) than clipping but complete obliteration remains an ongoing challenge. Total angiographic occlusion of small-necked aneurysms (<4 mm) can be obtained in a high percentage of cases. The endovascular coil treatment of wide-necked aneurysms remains difficult with complete angiographic occlusion reported in <15 % of cases.

The Boston Scientific Neuroform microdelivery stent was designed as an adjunct to coil embolization of wide necked intracranial saccular aneurysms.

While endovascular coils are FDA approved for the treatment of intracranial aneurysms, there is currently no effective approved method for the treatment of wide-necked cerebral aneurysms. The FDA has designated the Neuroform3 microdelivery stent as a Humanitarian Use Device (HUD). Use of the Neuroform3 microdelivery stent provides treating physicians with a tool to treat these difficult aneurysms that was previously not available.

Mr S. initially presented in early 2004 with a wide neck 11mm basilar tip aneurysm. Surgical clipping of this aneurysm in this location carries a high degree of morbidity, and he was therefore discouraged from aggressive therapy. He was lost to follow-up and presented back in July of this year at which point a repeat cerebral angiogram demonstrated an increase in size of the aneurysm from 11mm to 16mm. Last week Dr Spinos placed a Neuroform stent across the neck of this aneurysm and then used 17 GDC detachable platinum coils to completely treat this aneurysm. Mr S. was discharged in excellent condition within 36hrs of the procedure.