

Baseline QMRA after endovascular treatment of a cavernous carotid aneurysm with flow diversion

NOVA™

Case No. 021

PHYSICIAN'S CONCERNS?

Preservation of ICA and ipsilateral MCA flow after stenting, as the stent did not fully expand on deployment

HOW DID NOVA HELP?

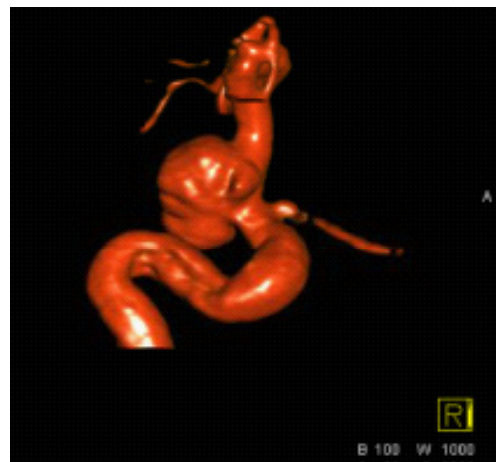
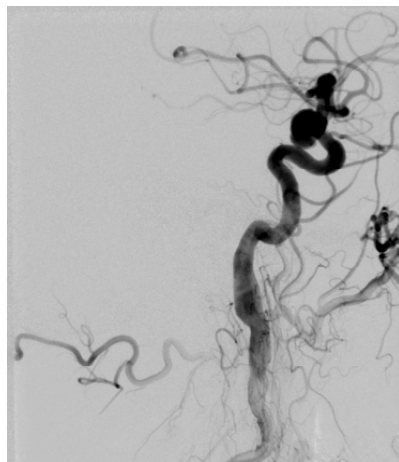
- NOVA demonstrates normal middle cerebral artery flow after stenting of the ipsilateral ICA
- Quantitative vessel flow measurements establish a baseline for comparison in future follow up

History

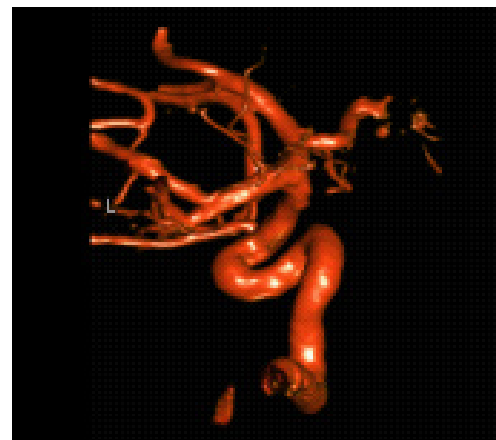
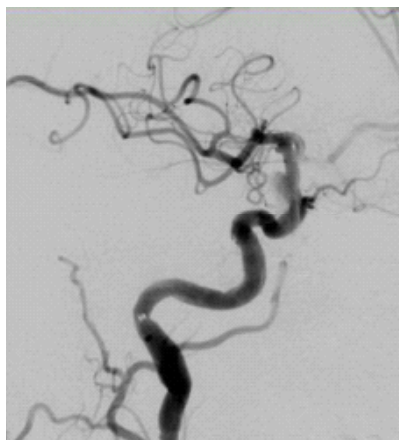
A 58-year-old, right-handed woman was referred for findings of a right carotid aneurysm found upon workup for dementia. A CAT scan angiogram showed a saccular aneurysm of the right carotid cavernous intradural segment measuring 3 x 8 x 9 mm.

She underwent angiography and placement of a Pipeline™ stent.

Pre-stent Images



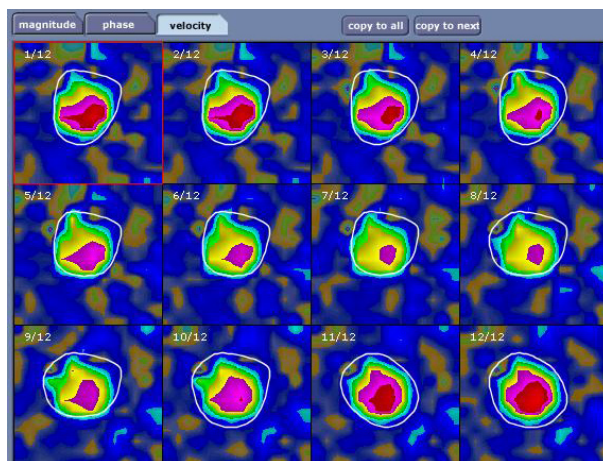
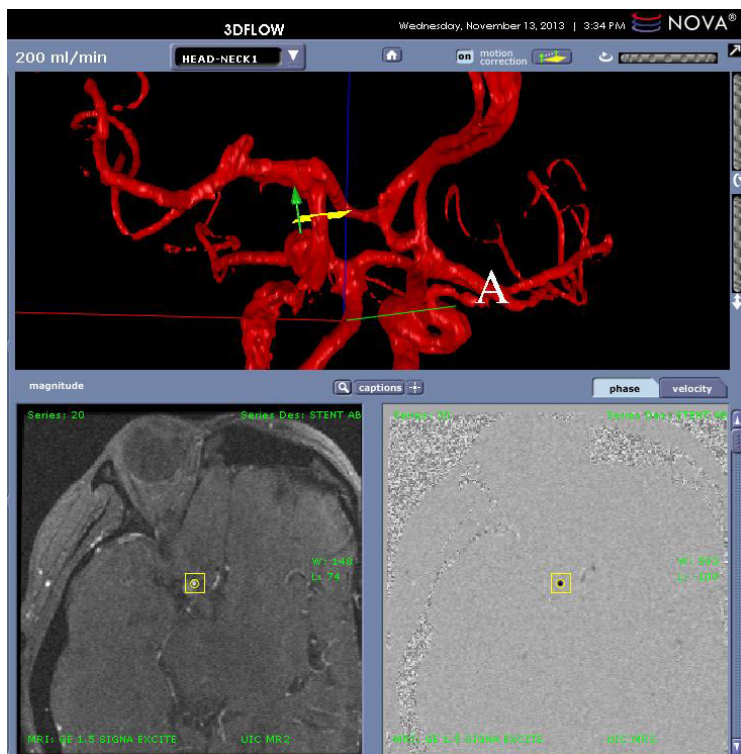
Post-stent Images



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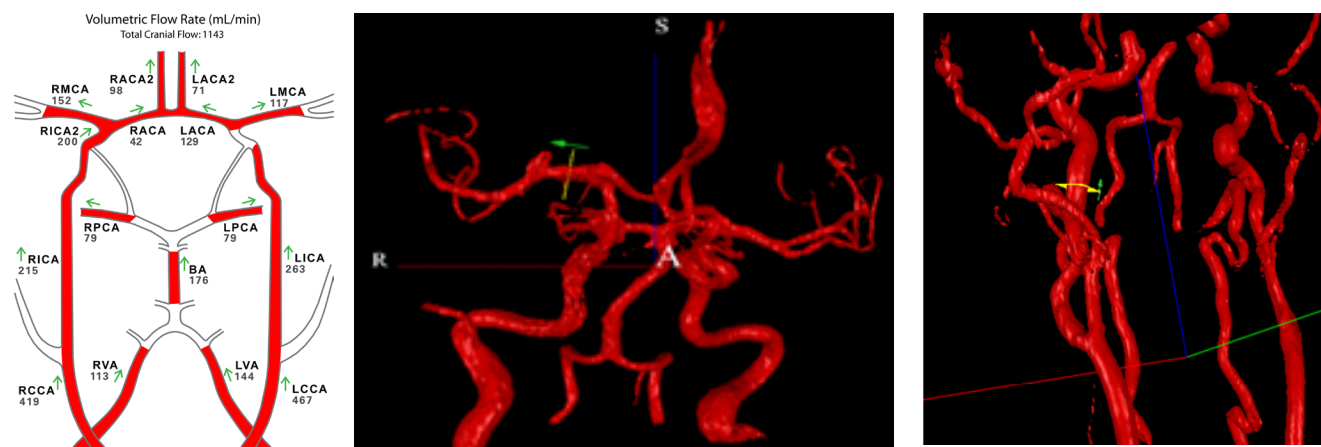


RICA velocity contours show laminar flow (above)

NOVA 3D showing measurement location on the supraclinoid ICA (top left) and associated 2D phase contrast MRI images (bottom left)

NOVA Report

NOVA Vessel Map and 3D images with measurement plane on RMCA and proximal RICA



NOVA QMRA confirms normal right middle cerebral artery flow after ipsilateral internal carotid artery stenting

Conclusions

This case demonstrates the capability of quantitative magnetic resonance angiography to document a successful intervention and provide a baseline for future non-invasive, non-contrast follow up of endovascular treatment.

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