

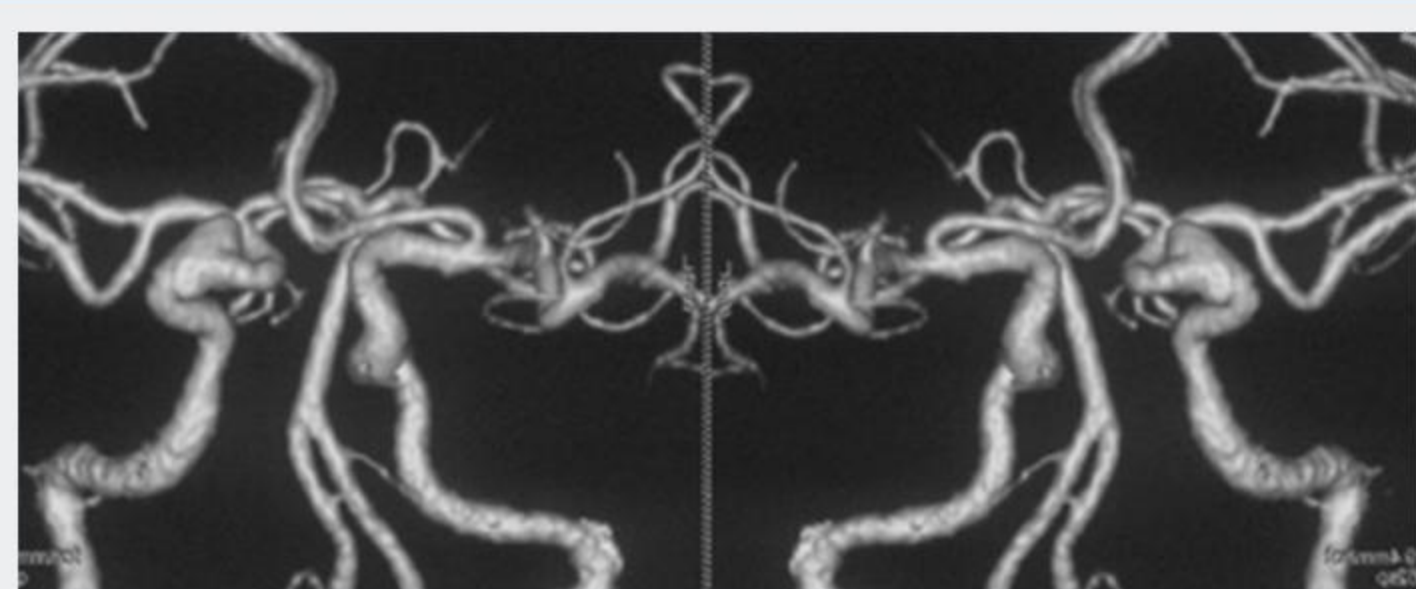
Therapy of Ophthalmic Segment Aneurysms of Internal Carotid Artery with Nuva® Flow Diverter

With the improvement of new intervention materials and technologies, intravascular treatment is safer and more effective for the ophthalmic segment aneurysms and can avoid damage to the optic nerve, and thus it hardly ever causes visual impairment when being compared with surgical clipping^[1]. One study reported that the occlusion rate of paraclinoid aneurysms treated with stent-assisted coils was more than 95%, and that of paraclinoid aneurysms only treated with coil embolization was only 54.2%^[2]. However, in fact, individualized treatment should be also used for wide-necked aneurysms in addition to intravascular treatment^[3]. Therefore, higher requirements are imposed to instruments.

Basic information about the patient:

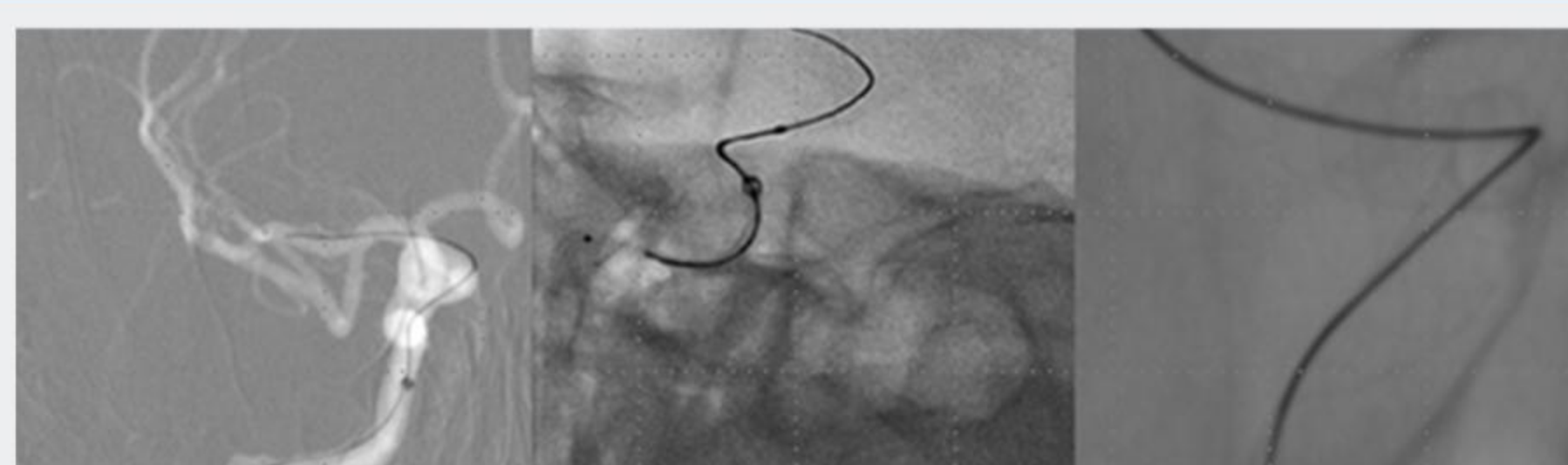
Male, 53 Y. He was admitted to the hospital because of discovery of unruptured intracranial aneurysms for five months.

Preoperative examination:



Cranial CTA shows: right internal carotid artery C6 aneurysm

Treatment option: The patient underwent Nuva® flow diverter implantation on July 24th, 2019



The microcatheter of the Nuva® flow diverter was super-selected into the M1 segment of the right middle cerebral artery. Supported by multiple projection angles, one Nuva® (4.5mm*20mm) flow diverter was slowly released, so as to cover the entire aneurysm neck. Meanwhile, the stent release process was clearly visible.

Summary:

This case illustrates that the Nuva® Flow Diverter not only can effectively treat the wide-necked ophthalmic segment aneurysm of internal carotid artery, it also can protect the optic artery. It is proved that the mesh of the Nuva® Flow Diverter are well designed to completely meet the clinical needs. This approach is safe and effective, and the postoperative effect was good. However, excellent strut apposition, and clear visibility. It is foreseeable that Nuva® will become a safe and effective tool to treat aneurysms in the future.

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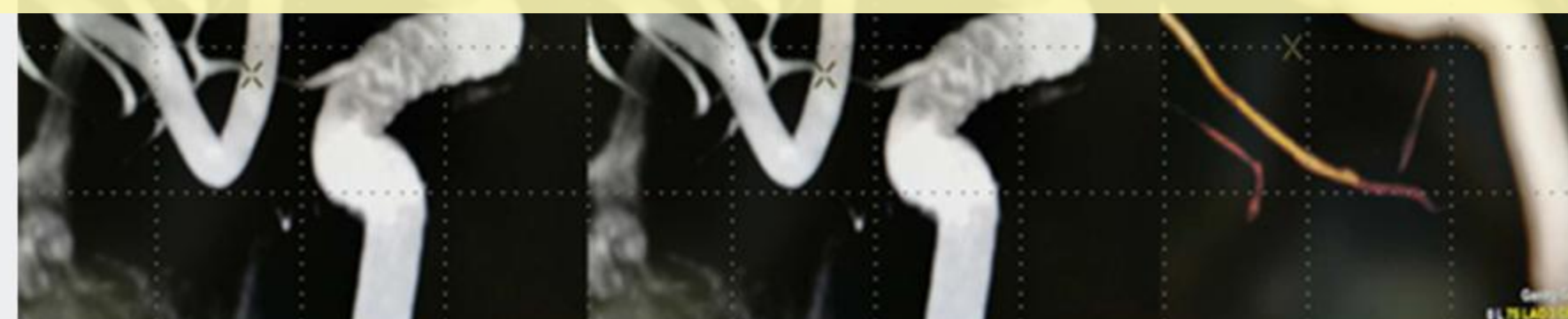
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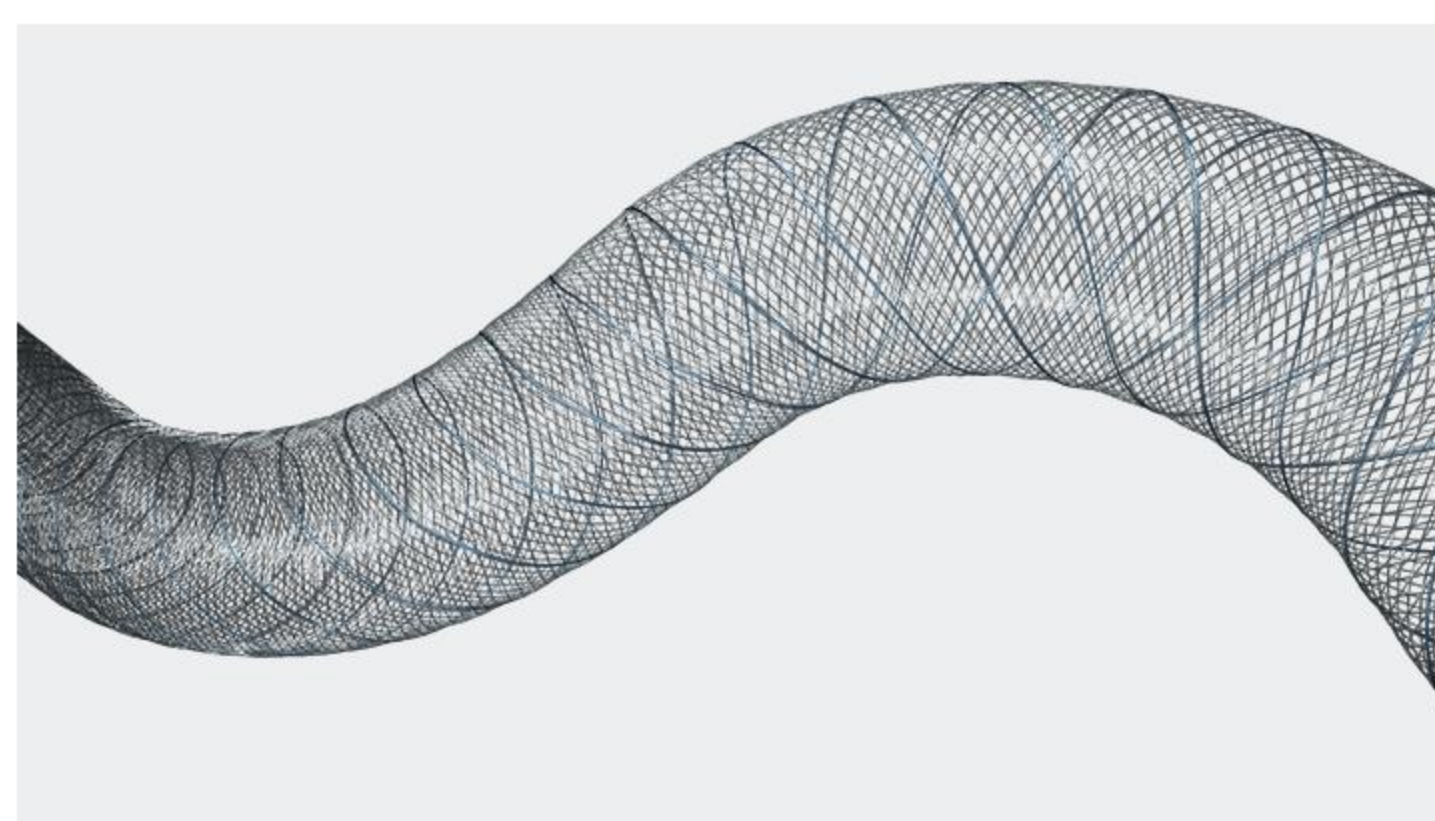
3D+AP and lateral view of right neck



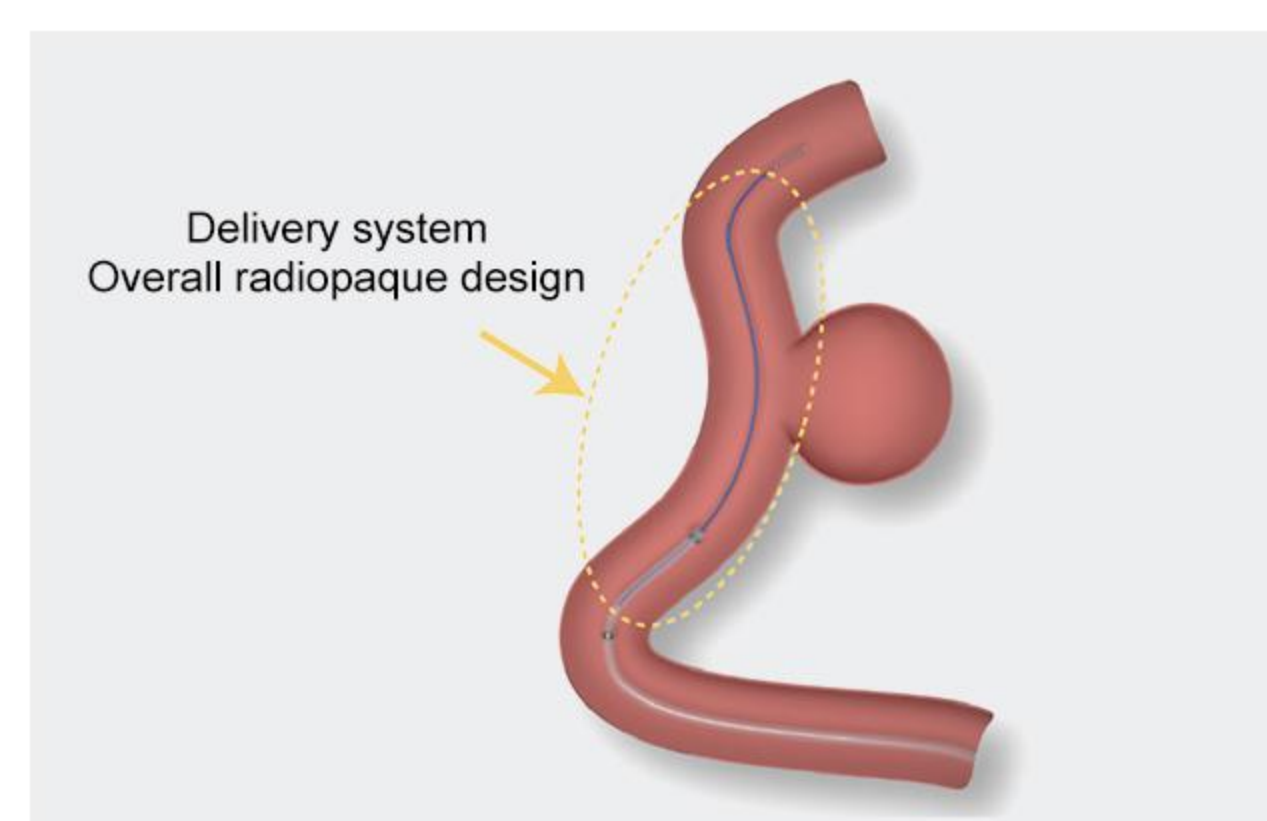
Subsequently, he was followed up and re-examined on June 1st, 2020. His re-examination results showed that aneurysms were well occluded so as to achieve anatomical cure. At the same time, parent artery and ophthalmic artery were clearly visible under angiography.



- Nickel-titanium and platinum-iridium wire braided, making positioning and release more accurate.
- Distal platinum tungsten marker ensures great visibility.
- Specially designed proximal marker and resheath marker.



- 30-35% metal to artery ratio, with excellent lesion coverage.
- Wide range of specifications (82 types).
- Minimum compatible microcatheter I.D. is 0.027".



- Unique overall radiopaque design make the release process easier to control.
- Reposition can be achieved when its release does not exceed the resheath marker.

References

- [1] THORNTON J, ALETICH VA, DEBRUN G M, et al. Endovascular treatment of paraclinoid aneurysms[J]. Surg Neurol, 2000, 54(4):288- 299.
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- [3] Yang Jie, Guan Sheng, Xu Haowen, et al. Study on intravascular embolization of ophthalmic segment aneurysms [J]. Journal of Interventional Radiology, 2016, 25(9): 750-754.