Editorial

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Endovascular Treatment of Wide-Neck Visceral Artery Aneurisms with Stent - Assisted Coiling

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Editorial

In the past the treatment of visceral artery aneurysms (VAAs) was exclusively surgical and rarely diagnosed, in elective or emergency cases. The development of image techniques and endovascular procedures changed the history of the therapeutic options of this pathology. Endovascular management of VAAs has emerged because of the high efficacy and low invasiveness [1,2]. Planning is the key of success in the cases of not ruptured VAA, choosing the best technique for each case individually. Almost all patients are asymptomatic and the principal indication to treat VAA is 2.0 or 2.5 cm, they are still rare, if they rupture, presents a high mortality rate, to prevent rupture by excluding VAA and saving branchs patency is our objective [1].

Techniques treatment of wide-necked aneurysms with Stent-Assisted Coil Embolization (SACE) in complex wide-necked bifurcation cerebral aneurysms demonstrated its efficiency, and can be applied in extra cranial aneurysms [1-7].

Several stent-supported coiling techniques have been done for treating wide-necked bifurcation aneurysms including the Y-stent and waffle-cone constructs, Double waffle-cone technique-using twin nitinol detachable stents [2-5]. Endovascular treatment of wide-necked aneurysms is not yet well established and may require more experience and knowledge. First conceived in neuro interventional practice, are based on stent-assisted embolization to prevent coil prolapse during deployment and help packing resulting in a stable scaffold holding the coils into the aneurysm sac, and shows a lower rate of recanalization in the larger aneurysms [2-8]. Safety and stability is the differential of this technique that uses the stent as support for orientation of the positioning of the coils.

Procedure Technique

All aneurysms are treated using a transfemoral or transbraquial approach. The stents generally used are Enterprise stent (Cordis Endovascular, Warren, new Jersey, USA) or Solitaire AB stent (Medtronic, Dublin, Ireland). The size of the Aneurism neck and the diameter of the proximal parent artery give us the size of the stents. An example where the Solitaire AB stent was used for treatment with embolization of three right renal artery aneurysms with AXIUM™ 3D detachable coils, largest aneurysm was 2.8 mm **(Figures 1 and 2)** Stent was deployed with the proximal edge in the parent artery, and the distal edge in the proximal fundus of the larger aneurysm – arterial reconstruction with two telescoped nitinol stents and coils. Endovascular Treatment of wide-neck VAAs with stent-assisted coiling is now a viable and safe, effective for treating patients challenging VAAs, with complex, wide-necked bifurcation aneurysms whose anatomic features are unfavorable for conventional coiling **(Figures 1 and 2)** [2-8] however, long-term follow- up results are needed to evaluate this technique.

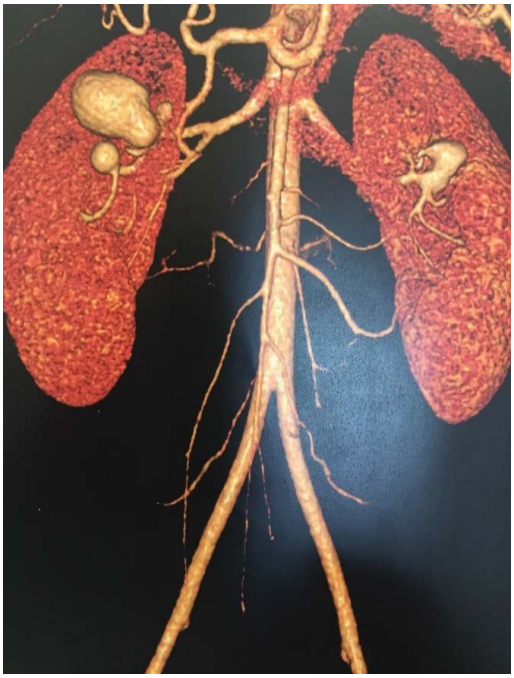

Figure 1 From left to right- AngioTC with three right renal artery aneurysms with wide-necked aneurysm.

Figure 2 DSA demonstrate after stent assisted coiling the aneurysms complete occlusion.

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