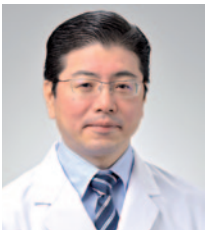




Aesculap® YASARGIL Aneurysm Clip System Titanium Mini Clips with Fenestration

When to use the new Yasargil Mini Fenestrated Clips and its advantages



The small cerebral aneurysms with narrow neck (3–4 mm in diameter) can be treated by a single clip without any neck remnant. But in cases with large cerebral aneurysms (over 5 mm in diameter), when those aneurysms were clipped by a single clip, neck remnants remain because

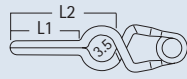
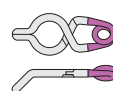
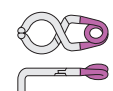
those aneurysms have anatomically broader necks than those of smaller ones. Thus, the remaining neck will be a problem in regard of complete closure/treatment.

As Tatsuya Ishikawa MD mentioned in his paper 1) about the ideal closure line for cerebral aneurysms, multiple clipping techniques are often performed for complete occlusion of aneurysms without any neck remnant. We have been performing combined clipping techniques, using existing Yasargil large (Standard size) fenestrated clips, to aim for complete neck occlusion where the neck remnant exists. Especially existing, dog ear clips FT902T/FT904T are frequently used for neck remnants of 2–3 mm in size. These dog ear clips are developed to occlude those neck remnants and have shown mainly good outcomes. However, those large (Standard size) fenestrated clips need to cross the first clip. Their blades are quite broad so that the proximal section of the clip blades have a triangle-shaped gap of 0.5 mm. This gap becomes a difficulty when the wall of aneurysm is too thin, the clip cannot occlude the neck remnant completely.

To solve this problem I collaborated with Aesculap to develop the new Yasargil Mini Fenestrated clips. Due to their thinner blades, the triangle-shaped gap at the proximal section of the blades is reduced. In addition the smaller spring geometry allows their use in locations where existing clips with larger (Standard size) spring geometry would interfere with nerves and surrounded brain tissue. With these new Yasargil Mini Fenestrated Clips, we can now treat more patients by multiple clipping techniques.

- **First Mini clips with fenestration**
 - Allow using fenestrated clips in narrow spaces
- **Thin blades and thus a reduced triangle-shaped gap at the proximal end**
 - For reconstruction of the vascular structure with multiple clipping techniques
- **Area of use:**
 - Neck remnants of clipped aneurysms like "Dog-ear aneurysms"

PERMANENT

Art. No.		Blade length mm L1/L2	Maximal opening mm	Closing force g	Diam. of fenestration mm
FT802T		3.0/6.9	3.2	110	3.5
FT804T		3.0/5.1	3.2	110	3.5

Rokuya Tanikawa, M. D.

Director Stroke Center, Department of Neurosurgery
Teishinkai Hospital, Sapporo, Japan

Reference

- 1) Ishikawa T, Nakayama N, Moroi J, Kobayashi N, Kawai H, Muto T, Yasui N. Concept of Ideal Closure Line for Clipping of Middle Cerebral Artery Aneurysms – Technical Note. *Neurol Med Chir.* 2009;49(6): 273–8
<http://dx.doi.org/10.2176/nmc.49.273>

