

How to perform ICAS with Wingspan stent system?

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Purpose

Although it is true that there are many controversies at the present time, more than 10 years after the treatment of intracranial cerebral artery stenosis using the wingspan stent system began, good results have been derived from several recent studies including the WEAVE trial, and it is attracting new attention. In addition, while thrombectomy for large vessel occlusion is becoming one of the most effective treatments, the current reality is that underlying intracranial arterial stenosis is emerging as a new topic. At this point, the most important thing to the medical staff who are directly treating is probably how to do it safely and successfully. What I would like to introduce today is what we must overcome in the process of preparing for and proceeding with treatment.

Methods:

I would like to introduce it by dividing it into five topics.

First, how should we understand intracranial stenosis?

Second, what should be considered when guiding, ballooning, and stenting?

Third, what problems are there in treating stenosis in the ICA bifurcation area?

Fourth, how can the problem of restenosis be resolved?

Finally, is the purpose of angioplasty to prevent stroke only?

Results:

Since what is seen on the angiogram is the shape of the inner surface of blood vessels, you must imagine the actual three-dimensional shape before treatment. When starting the procedure, a strong guiding must be prepared so that it can proceed stably from the beginning to the end. When ballooning, it is safe to do it step by step instead of expanding it all at once, and if necessary, post-stent ballooning is very helpful. Of course, the size and length of the stent is important, but it is very important to deploy it in an appropriate location according to the shape of the blood vessel around the lesion. When treating stenosis in the ICA bifurcation area, you need to carefully examine the relationship with ACA and consider various possibilities. When restenosis occurs, it is necessary to carefully observe the trend and decide whether to treat it. Although it is possible to treat only with a normal balloon, if necessary, a drug eluting balloon can also be a good option, albeit in a limited way. The basic goal of angioplasty is, of course, to prevent stroke recurrence, but the effect on perfusion improvement can also be a very important goal.

Conclusions:

It is important to remember that angioplasty itself is a violent procedure, no matter how hard we try to be careful. So, it is important to be very careful in deciding which patient to treat, and to predict and prepare as much as possible for various things that can be considered in the course of treatment. In addition, in order to detect restenosis early and respond appropriately, angiographic FU must be thoroughly performed and related patient symptoms must be examined in depth. Finally, all of the contents so far are limited from my experience, and if a new problem arises in the process of each patient's treatment, you should not be bound by existing preconceived notions and think new things.