Nephrology Dialysis Transplantation

Abstracts

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WHEN TABATIÈRE ARTERIOVENOUS FISTULA IS MADE AT INITIAL SURGERY, THE ASSISTED PATENCY OF THE FOLLOWING RADIOCEPHALIC ARTERIOVENOUS FISTULA WILL BE PROLONGED

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**INTRODUCTION:** There are reports that arteriovenous fistula (AVF; for short) occlusion has two peaks after the second years and eighth years after the operation. In Japan, the average age of chronic dialysis patients exceeded 68 years. From at the initial surgery, it is necessary to contrived to vascular access (VA; for short). In a simple comparison, some reports showed that the assisted patency of Tabatière arteriovenous fistula (Taba-AVF; for short) is poorer than the forearm radiocephalic AVF (RCAVF; for short). However, there are few reports from the viewpoint of long-term hemodialysis life as a series of maintenance of VA.

METHODS: We selected two groups under next restriction. In the last 30 years, among patients who took all VA surgeries and repair treatments in our hospital, we targeted patients who had followed more than 5 years of progress and had end point by 2019. Group A (42 cases) of whom the first VA surgery was performed on the left forearm Taba-AVF and the next surgery has done to the ipsilateral forearm RCAVF. Group B (132 cases) patients had initial VA surgery of RCAVF in the left forearm under the same restriction. In group A, the start point was when the Taba-AVF became difficult to repair, and the end point was when reconstructing to ipsilateral RCAVF became difficult in use after the restorations, or at the death excluding suicide. In group B, the end point was at the time of made secondary RCAVF or made subsequently new VA, or at the time of death excluding suicide. We compared the two groups about the primary failure rate and the assisted patency rate of the left forearm RCAVF. In our hospital, we mainly enforce with side-to-end anastomosis, when we make Taba-AVF and RCAVF. And AVFs were performed by three surgeons with similar skills.

**RESULTS:** Primary failure (PF; for short) after surgery was defined as thrombus formation by 4 weeks after operation, or the blood flow rate stayed less than 150 ml/min by 4 weeks after operation. PF rates were 28.6% (12 cases) in group A, 27.3% (36 cases) in group B. There was no difference in the occurrence of PF rates between A and B groups. In Group A, there was no cases to lapsed into PF in cases of transited from Taba-AVF to RCAVF. From the above, we judged that the surgical difficulty levels of both groups were comparable and we judged that we adapted those surgical procedures correctly. In group A, from the time of the transition from RCAVF to the end point, the maximum was 19.24 years (7022 days), the average was  $6.16\pm4.06$  years (2247 $\pm1481$  days). By contrast, in group B, the time when transition from RCAVF to the end point, the longest was 16.99 years (6201 days), the average was  $1.84\pm3.0$  years (670 $\pm1108$  days)

CONCLUSIONS: When Taba - AVF has been enforced properly, the surgery success rate is more high and assisted patency rate become long, after changing VA to RCAVF in the ipsilateral. Taba-AVF as primary VA means that not only growing VA vein, but is useful for VA life extended. The average assisted patency rate of RCAVF that was transferred from Taba-AVF was almost about 6 years, and the average assisted patency rate in group B, which was RCAVF since initial surgery, was almost about 2 years. There was a difference of 4 years among 2 groups. This difference can not be ignored. Helping other noninvasive treatments such as shunt vascular massage combined is also important. Taba-AVF is properly performed, which enables the hemodialysis period by AVF. These efforts lead to the medical economic merits.