

**Table S1. Statistical analysis**

Statistical method	Details
Shapiro-Wilk test	<ul style="list-style-type: none"> <li>• Tests the normality assumption.</li> </ul>
Independent 2-sample Student's t test	<ul style="list-style-type: none"> <li>• Compares a normally distributed continuous variable between 2 groups</li> </ul>
Mann-Whitney U test	<ul style="list-style-type: none"> <li>• Compares a non-normally distributed variable between 2 groups</li> </ul>
Hodges-Lehmann estimator	<ul style="list-style-type: none"> <li>• Calculates a median difference between 2 groups and its 95% CI</li> </ul>
Chi-square test	<ul style="list-style-type: none"> <li>• Compares categorical data with more than 1 level between 2 groups</li> </ul>
Fisher's exact test	<ul style="list-style-type: none"> <li>• Compares categorical data with 2 levels between 2 groups if the expected frequency of any cell is less than 5.</li> </ul>
Wilcoxon signed rank test	<ul style="list-style-type: none"> <li>• Compares 2 non-normally distributed paired variables within a group.</li> <li>• Assesses the longitudinal changes in vessel diameters from before to after BPB and the within-group difference between vessel diameter changes in both the inflow artery and outflow vein of the arteriovenous access after BPB.</li> </ul>
Multiple linear regression	<ul style="list-style-type: none"> <li>• Assesses the linear relationships between more than one independent variable and one dependent variable.</li> <li>• The independent variables included in the multiple linear regression analysis were age, sex, body mass index, BPB type, the volume of mepivacaine used for BPB, smoking history, and underlying diseases.</li> <li>• Independent variables with a variance inflation factor &gt;5 were regarded as multicollinear with some of the other variables [1].</li> <li>• Independent variables, the variance decomposition proportions of which were &gt;0.3 at the common condition index (&gt;10), were regarded as multicollinear with one another [1,2].</li> <li>• Among the multicollinear variables, more clinically irrelevant variables were excluded first from the regression models.</li> <li>• The final multiple linear regression models had differences &lt;0.1 between the coefficient of determination (<math>R^2</math>) and the adjusted <math>R^2</math>.</li> </ul>
Univariate Cox proportional hazards regression	<ul style="list-style-type: none"> <li>• Predicts the occurrence of complete occlusive access thrombosis at a specific time with one independent variable.</li> <li>• The independent variables included were age, diabetes mellitus, ischemic heart disease, post-BPB changes in the diameters of the inflow artery and the outflow vein from the arteriovenous access, and arteriovenous access type [AVG vs. AVF creation]).</li> <li>• Because 10 events per independent variable are required to obtain an unbiased multiple Cox proportional hazards regression model [3], univariate regression analysis was performed based on the number of patients developing complete occlusive access thrombosis, which was 14.</li> </ul>
Kaplan-Meier survival analysis	<ul style="list-style-type: none"> <li>• Calculates event-free probabilities between the beginning and end of the follow-ups.</li> <li>• A log-rank test was used to compare the Kaplan-Meier survival plots between 2 groups.</li> </ul>

- The survival plots were compared between patients with and without diabetes mellitus, between patients with and without ischemic heart disease, and between AVF and AVG.
- The median survival time, restricted mean survival time, and restricted mean time lost were calculated from the survival functions.

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AVF: arteriovenous fistula, AVG: arteriovenous graft, BPB: brachial plexus block.

## References

1. Kim, J.H. Multicollinearity and misleading statistical results. *Korean J Anesthesiol* **2019**, 72, 558-569, doi:10.4097/kja.19087.
2. Weissfeld, L.A. A multicollinearity diagnostic for models fit to censored data. *Communications in Statistics-Theory and Methods* **1989**, 18, 2073-2085.
3. Peduzzi, P.; Concato, J.; Feinstein, A.R.; Holford, T.R. Importance of events per independent variable in proportional hazards regression analysis. II. Accuracy and precision of regression estimates. *J Clin Epidemiol* **1995**, 48, 1503-1510, doi:10.1016/0895-4356(95)00048-8.