**Supplementary Table 1:** **Comparison of conventional and modified indicators for EVAR.**

|  |  |  |
| --- | --- | --- |
| 　 | **Conventional** | **Modified** |
| Aortic anatomy | 1. Proximal neck length ≥15 mm | 1. Proximal neck length 10 mm |
| 2. Infrarenal proximal angulation 45° | 2. Infrarenal proximal angulation 75° |
| 3. Minimum aortic diameter at renal artery level 28 mm | 3. Minimum aortic diameter at renal artery level 32 mm |
| Hemodynamics | 1. Stable hemodynamics | 1. stable hemodynamics |
| – | 2. Systolic blood pressure 80 mmHg |
| – | 3. Shock with systolic blood pressure 50 mmHg |
| – | 4. Organ hypoperfusion |

EVAR: Endovascular aneurysm repair.

**Supplementary Table 2: Characteristics of the 57 rAAA patients who underwent EVAR.**

|  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- |
| **Variables** | **Group 1 (*n*=23)** | **Group 2 (*n*=14)** | **Group 3 (*n*=15)** | **Group 4 (*n*=5)\*** | **Statistical values** | ***P* values** |
| Age/year | 71.2±9.1 | 76.9±10.0 | 66.8±14.0 | 64.2±7.9 | 1.327 | 0.275 |
| Sex |  |  |  |  |  |  |
|  Male | 83% (19/23) | 86% (12/14) | 87% (13/15) | 80% (4/5) | 0.133 | 0.936 |
| Comorbidities |  |  |  |  |  |  |
|  Hypertension | 65% (15/23) | 64% (9/14) | 60% (9/15) | 40% (2/5) | 0.112 | 0.945 |
|  CAD | 17% (4/23) | 21% (3/14) | 20% (3/15) | 20% (1/5) |  | 0.892 |
|  DM | 13% (3/23) | 14% (2/14) | 13% (2/15) | 0% (0/5) |  | 0.940 |
| Stent-graft |  |  |  |  |  | 0.864 |
|  Endurant | 87% (20/23) | 79% (11/14) | 87% (13/15) | 100% (5/5) |  |  |
|  Excluder | 4% (1/23) | 14% (2/14) | 7% (1/15) | 0% (0/5) |  |  |
|  Hercules | 9% (2/23) | 7% (1/14) | 7% (1/15) | 0% (0/5) |  |  |

Data are present as number (%). \*Not included in the final analysis for avoiding the large deviation to the result by small sample size. CAD: Coronary artery disease; DM: Diabetes mellitus; EVAR: Endovascular aneurysm repair; rAAAs: Ruptured abdominal aortic aneurysm.