Fbevar is no better than Open repair for complex AAA

Latest results from the Windows trial

Disclosure

• None

Windows Trial

Multicenter Prospective Comparison
of F - Bevar vs Open Surgery

F and Bevar

• « High risk » patients
• Anatomically suitable for f/b evar
• Treated in selected centers

Open Surgery

• All patients included in the mandatory French national data base coding system during the same period of time

Three Groups

184 vs 1382  42 vs 225  42 vs 71
Results and Factors Affecting Early Outcome of Fenestrated and/or Branched Stent Grafts for Aortic Aneurysms
A Multicenter Prospective Study
A. Marcelli, MD,* E. Prevedello, MD,* and J. P. Bergueran, MD
P: On behalf of the RITA303 investigators

**Objectives:** To present results and identify potential factors of early outcome of fenestrated and/or branched stent grafts for the treatment of patients with abdominal aortic aneurysms.

**Background:** In the United States, minimally invasive techniques including endovascular repair of descending thoracic, thoracoabdominal, and Jehovah’s Witness patients have shown excellent results, as well as a significant reduction of the hospital mortality compared with open repair. The purpose of this study was to determine if the same results can be achieved in patients with thoracoabdominal thoracic aortic aneurysms (TAA) using endografts.

**Methods:** A total of 58 patients were enrolled (31 male, 27 female; mean age 68 ± 10 years; mean diameter of the infrarenal aortic aneurysm 6.1 ± 1 cm). Three hundred and sixty-seven endografts were used (311 Stentgraft, 53 Excluder, 17 Talent, 9 Zenith, and 5 Evend). Twenty patients had TAA and 38 had thoracic endovascular aortic repair (TEVAR). The mean procedure time was 198 ± 76 minutes, and the mean hospital stay was 6 ± 2 days. The median follow-up was 28 months (range, 6–52).

**Results:** The primary end point of the study was survival at 30 days. Kaplan-Meier survival analysis revealed a 30-day survival rate of 97.2%. The secondary end point of interest was the incidence of major complications (vascular, cardiac, neurological, respiratory, and infectious complications). During the follow-up period, there were no deaths, 2 major complications, and 6 minor complications.

**Conclusions:** In conclusion, the study demonstrates that endograft repair of thoracoabdominal aortic aneurysms is feasible and safe. The technique allows for a significant reduction in hospital mortality compared with open repair, and it is associated with a low incidence of major complications. However, further studies are needed to validate these findings and to determine the long-term outcomes of this technique.

### Table 1: Predictive Factors of Outcome in Patients Enrolled in the EVAR Trial

<table>
<thead>
<tr>
<th>Predictor</th>
<th>Odds Ratio (95% CI)</th>
<th>P Value</th>
</tr>
</thead>
<tbody>
<tr>
<td>Age</td>
<td>1.02 (1.01–1.03)</td>
<td>&lt;.001</td>
</tr>
<tr>
<td>Sex (male)</td>
<td>1.05 (0.98–1.12)</td>
<td>.14</td>
</tr>
<tr>
<td>Preoperative renal failure</td>
<td>1.24 (0.97–1.60)</td>
<td>.07</td>
</tr>
<tr>
<td>Preoperative smoking</td>
<td>1.12 (0.86–1.48)</td>
<td>.44</td>
</tr>
<tr>
<td>Preoperative diabetes</td>
<td>1.11 (0.83–1.48)</td>
<td>.64</td>
</tr>
<tr>
<td>Preoperative hypertension</td>
<td>1.10 (0.83–1.48)</td>
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<tr>
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</table>

**30-Day mortality:**

- **In hospital mortality:** 6.7%
- **Predictive factors of death and complications:**
  - Aneurysms extent
  - Duration of the procedure
  - Technical difficulties

**Figure:**

- **In Hospital Mortality: Group 1**
  - 4.5%
  - 5%
- **In Hospital Mortality: Group 2**
  - 12%
  - 4%
  - P = .05
- **In Hospital Mortality: Group 3**
  - 12%
  - 20%
What are the mid-term results?

**Survival at Two years**

- **Comparison CRF vs. PMSI:**
  - **64.3% (F and b evar)** vs. **69% (open)**
  - *p=0.6797*

- **Comparison PMSI vs. PMSI (In hospital death):**
  - **71.4% (F and b evar)** vs. **69% (open)**
  - *p=0.8347*

**Average Number of Rehospitalizations**

- **3.1 (F and b evar)** vs. **2.8 (Open Surgery)**
  - *(p=0.7599)*

**Costs**

- **F Bevar:** 38 212 € (±23 252)
- **Open:** 16 497 € (±16 695)
  - *p=0.0001*

**Total Cost/ Patient at Two Years**

- **65 643 € (±32 094) (F/bevar)**
- **43 164 € (±41 061) (open surgery)**
  - *(p=0.0030)*
In Summary

Survival:
At two years, there is no difference between Fbevar and open surgery.
The early advantage of Fbevar is lost at one year.

Rehospitalization: no difference

Cost: Fbevar is more expensive

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Physicians Prescribe Drugs

Of which they know little
To patients they know even less
To cure diseases they know nothing about

STIC: actors

- C. Scientifique: JP Beequetin, J Marzelle
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- ARCs et TEC: S Idir, N Ady, D Selmane, M Gaba
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