REVAR Vs Open Repair: Open Repair of RAAAs is A Bad Option & Here Is Why!

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Disclosure

- Founder of Tulip Endovascular Innovation, Ireland
- Founder of Embricon Endovascular, Ireland
- Founder of Green Medical, Michigan, USA
- Research Education Grants:
  - Cordis, Medtronic, Endologix, Gore, Vascular Solutions
  - BMS, MSD, AstraZeneca, Cardiatis, Abbot, AOTI
  - Sanofi-Aventis, Pfizer, Ulbrich, Bolton Medical
  - SFI, EI, NSAI, HRB

Management of RAAA!

- Which Patients Are Going To Die From Something Else Before They Benefit From Emergency AAA Repair?
- What Price The Patient is Willing To Pay For Quality of Life?
- In Economic Terms How Much is The Healthcare System Keen To Invest For The Optimal Management of RAAA?

REVAR/DRESS Technique

- No Limit for What You Can Achieve

REVAR/ Bilateral CIAA

- Coverage of Both IIA Without Embolization

REVAR For Aorto-Caval Fistula
**REVAR For Aorto-Caval Fistula & Common Iliac Vein Fistula**

**Clinical Reality**

EVAR

316

30 Day Mortality

No AAA 33

EVAR 150 38  (25.3%)

OR 112+4  43  (38.4%)

No Intervention

17 16   (94.1%)

No EVAR

166

P=0.06

**REVAR First Policy**

Our Turn Down Rate is 15% & We Included Only True Ruptures

**IMPROVE Per-Treatment Analysis**

<table>
<thead>
<tr>
<th></th>
<th>Clinical Reality</th>
<th>EVAR 316</th>
<th>30 Day Mortality</th>
<th>Clinical Reality</th>
<th>OR 297</th>
<th>30 Day Mortality</th>
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<tbody>
<tr>
<td>No AAA</td>
<td>33</td>
<td>30</td>
<td>25.3%</td>
<td>No AAA</td>
<td>22</td>
<td>8 (22.2%)</td>
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<tr>
<td>EVAR</td>
<td>150</td>
<td>36</td>
<td>(25.3%)</td>
<td>EVAR</td>
<td>36</td>
<td>8 (22.2%)</td>
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<tr>
<td>OR</td>
<td>112+4</td>
<td>43</td>
<td>(38.4%)</td>
<td>OR</td>
<td>220</td>
<td>81 (36.8%)</td>
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<tr>
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<td>17</td>
<td>16</td>
<td>(94.1%)</td>
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<td></td>
<td>No OR</td>
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<td>P=0.09</td>
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</table>

30 Day Mortality

EVAR 150+36= 186

OR 112+4= 336

38+8= 46 24.7%

47+81= 128  38.1%

P<0.002

In-hospital Survival From AAA, Intervention Rates, REVAR Rates, are Lower in England than in the USA. Turn Down Rate 67.53%

Hospitals with REVAR First Strategy

In both Stable & Unstable REVAR with Diminished 30-day Mortality

Weekend Admission For Ruptured Aortic Aneurysm is Associated With An Increased Mortality Compared With Admission on A Weekday
After 30 Days REVAR is Comparable to Open Repair, With No Secondary Intervention
Patient Expires From Non Aneurysmal Causes: Cardiovascular Related Problems Over the First 5 Years & Malignancy Over the Second 5 Years
No Gender Difference in Outcome
No Week End Or Out of Hours Performance Difference
QTWIST is Superior For REVAR Patients

At Time of Hospital Discharge The Cost Disparity Between Two Different “Treatment Algorithms” Holds Financial Validity
At One Year The Cost-effectiveness is More A Factor of Treatment Modality Rather Than The Initial Care Pathway
This Analysis is Crucial to inform CEO’S About Superiority of REVAR, as they Cannot Afford To Be Pragmatic & Bottom Line Costs Are of Far More Important Consequences than statistical jargon

REVAR is Associated With Longer Aneurysm Free Mortality over the Last Decade & Superior Approach To Open Surgery For RAAA
In Clinical Settings Where Adequate Resources, Personnel & Surgical Expertise Are Present, REVAR Should Be Strongly Considered For All Patients
REVAR Confers Significant Benefits in Terms of Reduced Hospital Mortality, Shorter Hospital Stay, & Reduced Need For Rehabilitation