Diminished Sexual Function In AAA Patients Occurs After EVAR As Well As Open Repair

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Disclosures
Consultancy, travel grants:
WL Gore,
Vascutek,
Cook,
Cordis,
Jotec,
Lombard,
Philips,

Physiology

Penile erection is a neurovascular event
Involves the somatic and autonomic
(sympathetic and parasympathetic) nerve fibers

Definition

Erectile dysfunction (ED) is defined as the inability to achieve and maintain a penile erection for adequate sexual intercourse

Epidemiology

ED, increasing between 25 and 80 years from <1% to 76%

Epidemiology

52% of men between 40 and 70 years had an ED
three months after the procedure, all EVAR and OR patients had regained their pre-operative sexual function level.


Gothenburg showed in a prospective study a significant impairment in the quality of erection after one year in both groups.


Study

Study design: single centre prospective trial
Study period: April 2009 to December 2011
Investigation Preop and after 1 year

Inclusion criteria: asymptomatic infrarenal AAA, male gender, no language barrier, good mental condition informed consent

KEED (Cologne assessment of ED)

<table>
<thead>
<tr>
<th>Question</th>
<th>Never (0%)</th>
<th>a few times (less than half the time)</th>
<th>sometimes (for about half the time)</th>
<th>often (for more than half the time)</th>
<th>Always (100%)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Do you have problems with your erections?</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>What about your interest in sex?</td>
<td></td>
<td></td>
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<tr>
<td>How satisfied are you with your erections?</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>How satisfied are you with your sex life?</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
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<tr>
<td>How satisfied are you with your sexual relationships?</td>
<td></td>
<td></td>
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</tr>
</tbody>
</table>

Specificity of 0.93
Sensitivity of 0.97
Score >17 is defined as presence of ED.
Results

Table 6. Number and percent of erectile dysfunction before and one year after surgery in both groups:

<table>
<thead>
<tr>
<th></th>
<th>Before surgery</th>
<th>One year after surgery</th>
<th>P Value</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Number (%)</td>
<td>Number (%)</td>
<td></td>
</tr>
<tr>
<td>Control (n=30)</td>
<td>10 (33.3)</td>
<td>12 (40.0)</td>
<td>0.583</td>
</tr>
<tr>
<td>EVAR (n=70)</td>
<td>20 (28.6)</td>
<td>28 (40.0)</td>
<td>0.230</td>
</tr>
<tr>
<td>Total</td>
<td>30 (28.6)</td>
<td>38 (40.0)</td>
<td>0.051</td>
</tr>
</tbody>
</table>

EVAR: endovascular aneurysm repair, OR: open repair

Results

Table 7. Mean, standard deviation (SD) and p-value of EQ-5D score over time in open and EVAR group:

<table>
<thead>
<tr>
<th></th>
<th>Before surgery</th>
<th>One year after surgery</th>
<th>P Value</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Mean ± SD</td>
<td>Mean ± SD</td>
<td></td>
</tr>
<tr>
<td>Control (n=30)</td>
<td>0.8 ± 0.3</td>
<td>0.7 ± 0.3</td>
<td>0.307</td>
</tr>
<tr>
<td>EVAR (n=70)</td>
<td>0.6 ± 0.3</td>
<td>0.6 ± 0.3</td>
<td>0.707</td>
</tr>
<tr>
<td>Overall</td>
<td>0.7 ± 0.3</td>
<td>0.6 ± 0.3</td>
<td>0.392</td>
</tr>
</tbody>
</table>

EVAR: endovascular aneurysm repair, OR: open repair

Conclusion

Patients with an AAA had:

a) high rate of preoperative sexual impairment
b) decline of sexual function after one year

No difference between EVAR and OR

Thank you for your attention