THERE ARE SEVERAL GOOD REASONS TO ELECTIVELY REPAIR AAAs <5.5 CM IN MAXIMUM DIAMETER:
WHAT ARE THEY?

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We recommend elective repair for the patient at low or acceptable surgical risk with a fusiform AAA that is ~5.5 cm.

Level of recommendation 1 (Strong)
Quality of evidence A (High)

• 4 RCTs, 3314 patients with AAA (4.0-5.5 cm)
• No advantage of Open or Endovascular repair vs. Surveillance of small AAAs

• Patients with rapid growth of AAA (~0.7 cm at 8 months, ~1 cm at 1 year) were excluded from RCTs
Patients with rapid growth of AAA (>0.7 cm at 6 months, >1 cm at 1 year) were excluded from RCTs.

Strict adherence to surveillance in RCTs is not the real-world experience.

If small AAAs became symptomatic or reached 5.5 cm, they were repaired.

CAESAR: Delayed repair in 60% at 3 years.
• Adherence to a surveillance is important
• Patients with small AAAs lost to follow-up will six times more likely to present with rupture

15,475 patients with AAAs (3.0-5.5 cm), 18 studies
• Rupture rate significantly increased
  • In women vs men (OR:3.76)
  • Current smokers
  • Higher blood pressure

211 patients
• 5% of men, 24% of women had rAAA <5.5 cm in size

Family history of aortic aneurysm is an independent risk factor for more rapid growth of small abdominal aortic aneurysms in Japan

Table III. Result of logistic regression analysis

<table>
<thead>
<tr>
<th>Variable</th>
<th>OR (95% CI)</th>
<th>P value</th>
</tr>
</thead>
<tbody>
<tr>
<td>Initial diameter</td>
<td>2.29 (1.58–3.37)</td>
<td>&lt;0.001</td>
</tr>
<tr>
<td>History of hypertension</td>
<td>7.60 (2.62–21.4)</td>
<td>0.002</td>
</tr>
<tr>
<td>Family history</td>
<td>11.3 (2.69–47.3)</td>
<td>0.001</td>
</tr>
</tbody>
</table>

In patients with a small aneurism (4.0-5.4 cm) who will require chemotherapy, radiation therapy, or solid organ transplantation, we suggest a shared decision-making approach to decide about treatment options.

- Female patients
- Young patients at low surgical risk
- Positive family history
- Rapidly growing AAA
- Saccular aneurysms
CONCLUSIONS

• In 2019, size of the aneurysm matters
• Elective repair is recommended
  • In males at average risk with a fusiform AAA > 5.5 cm in size.
  • In females at average risk with a fusiform AAA > 5.0 cm in size

CONCLUSIONS

• In 2019, size of the aneurysm matters
• Elective repair should be considered of a fusiform AAA > 5.0 cm in size
  • In low risk young patients
  • In average risk patients with a family history of AAA
  • In patients who will require chemotherapy, radiation or solid organ transplantation

CONCLUSIONS

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• Elective repair is recommended
  • In males at average risk with a fusiform AAA > 5.5 cm in size.
  • In females at average risk with a fusiform AAA > 5.0 cm in size
  • In patients with rapidly growing AAA
  • In patients with saccular AAA

CONCLUSIONS

• In 2019, size of the aneurysm matters
• Elective repair is recommended
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THANK YOU!