

**DEBATE:**

**There is high level evidence that men with AAAs <5.5 cm should NOT undergo elective repair: AAAs <6 cm in men rarely rupture: The thresholds for repair of aortic and iliac aneurysms need to be raised**

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**Disturbingly large variation in AAA treatment policy**  
 Is it all about money?

**ORIGINAL RESEARCH ARTICLE**

**Variations in Abdominal Aortic Aneurysm Care**  
 A Report From the International Consortium of Vascular Registries

Proportion intact AAA repair at a diameter <5.5 cm for men and <5.0 cm in women

**Disturbingly large variation in AAA treatment policy**  
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Center-level analysis

**Level-1 evidence**  
 No benefit in repairing AAAs <5.5cm

**However, these studies do not address when repair is actually indicated**

**Chichester AAA screening RCT**

**Abdominal aortic aneurysm in 4237 screened patients: prevalence, development and management over 6 years**

**The Long-term Benefits of a Single Scan for Abdominal Aortic Aneurysm (AAA) at Age 65**

**Is surgery necessary for abdominal aortic aneurysm less than 6 cm in diameter?**

Alan P. Scott

**The Multicentre Aneurysm Screening Study (MASS)**  
 6.0cm or 5.5cm?

**Annals of Internal Medicine**

**A Sustained Mortality Benefit from Screening for Abdominal Aortic Aneurysm**

Alan P. Scott

**Threshold for repair in MASS vs. UKSAT and the NHS AAA screening programme (NAAASP)**

5.5 cm inner-to-inner with US ≈ 6.0 cm with CT

UKSAT  
MASS  
NAAASP

**Risk of rupture in the NAAASP**

ORIGINAL RESEARCH ARTICLE  
**Safety of Men With Small and Medium Abdominal Aortic Aneurysms Under Surveillance in the NAAASP**  
Oliver-Williams et al. Circulation 2019

Contemporary high-quality evidence shows a very low rupture risk (0.4%) for AAAs 5-5.5cm, measured with ITI on US (= 6.0cm with CT)

**PROPORTION of ruptures vs RISK of rupture**

15% of rAAA <5.5cm, but still only <0.5% of AAAs <5.5cm rupture

Distribution of aortic diameter  
Rupture AAA

For each rAAA <5.5cm, there are >200 intact AAAs 5.0-5.5cm

**Rapid expansion**  
not an indication for repair, but for re-measuring

A Myth Exposed: Fast growth in diameter does not justify precocious AAA repair  
M. A. Sharp and J. Collin Eur J Vasc Endovasc Surg 2003

Discontinuous, Staccato Growth of AAA  
H. Kurvers et al., New York, US J Am Coll Surg 2004

**Threshold for iliac Artery Aneurysm Repair**  
raised to ≥ 4cm in the ESVS 2024 AAA GL

A systematic review on endovascular repair of isolated common iliac artery aneurysms and suggestions regarding diameter thresholds for intervention  
Nektarios Chariki, MD, Vasileios Bouris, MD, Alexander Ristic, MD, David Landau, MD, and Nicos Latsopoulos, PhD, Sunny Brook and New York, NY

m = 6cm  
4% <4cm

Few internal iliac artery aneurysms rupture under 4 cm  
Matt T. Laine, MD, Martin Böhm, MD, PhD, C. Barry Bales, MB BCh, FRACS(1995), Zoltan Szeberin, MD, PhD, Ian Thomson, MChB, FRACS, Martin Altmuth, MD, E. Sebastian Debus, MD, PhD, Kevin Mani, MD, PhD, Gábor Menyheli, MD, PhD, and Maart Vermees, MD, PhD, Helsinki, Finland, Greece, Melbourne, Victoria, Australia, Budapest and Paris, Hungary, Dunedin, New Zealand, Trondheim, Norway, and Hamburg, Germany

m = 7cm  
6% <4cm

NATIONAL REGISTRY  
Editor's Choice: Nationwide Analysis of Patients Undergoing Iliac Artery Aneurysm Repair in the Netherlands  
Hendrik Janssen, Hans Nelissen, Henk-Jan Bouter, and Bart J. C. G. Geelkerke

m = 7cm  
10% <4cm

**We should choose to operate (an AAA), not because it is possible, but because it is necessary**

- AAAs <5.5 cm can be operated at low risk, but it is not necessary
- Contemporary high-quality evidence suggest that the thresholds for repair of AAA should be raised (≥6.0cm in men), and fast growth is not an indication for repair
- Iliac artery aneurysm should be considered for elective repair at a diameter of ≥4.0cm