A normal AAA screening does not rule out an AAA 5 years later

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A single US-scan at age 65 years is safe

Cut-off diameter 26mm

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Sub-aneurysmal aorta (25-29mm)

• 14% require repair within 10 years
• should be rescanned every 5 years

Nationwide AAA screening program targeting 65-year old men

• Total population: 9.5 million
• 700–900 AAA-deaths/year
• 21 independent counties
• Started in 2006 → nationwide since 2014
• ¼-million 65-year old men screened
  – 3700 (1.5%) screening-detected AAAs
  – Another 0.5% already known AAAs
  – 650 (17%) screening-detected AAAs operated on
  – Postoperative mortality 0.9%
  – Another 4000 sub-aneurysmal aortic dilatation (25-29mm)

The Uppsala AAA-cohort study

• All men born 1941-1945 in the county of Uppsala
• Screened/re-screened for AAA:
  – at age 65 years (2006-2010)
  – at age 70 years (2011-2015)
  – at age 75 years (2012-2015)
  – at age 80 years (2013-2015)
  – at age 85 years (2014-2015)
  – at age 90 years (2015-2015)
Risk of AAA-events after 5 years

Risk of new AAA after 5 years

Risk of progression to AAA after 5 years

Risk of progression to >54mm AAA

Risk of progression to rupture

Sub-aneurysmal aorta in women
Conclusion

• A normal AAA screening does not rule out an AAA 5 years later

• Sub-aneurysmal aortas (25-29mm);
  – are at high risk for progression to an AAA
  – which are likely to become clinically relevant (within 10 years)
  – for this reason, these patients should not be ignored