Growth Rates of the Normal, Sub-aneurysmal, and Aneurysmal Ascending Aorta:

A 5-year Follow-up Study from the Population-based Randomized DANCAVAS Screening Trials

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70TH ESCVS CONGRESS & 7TH IMAD MEETING





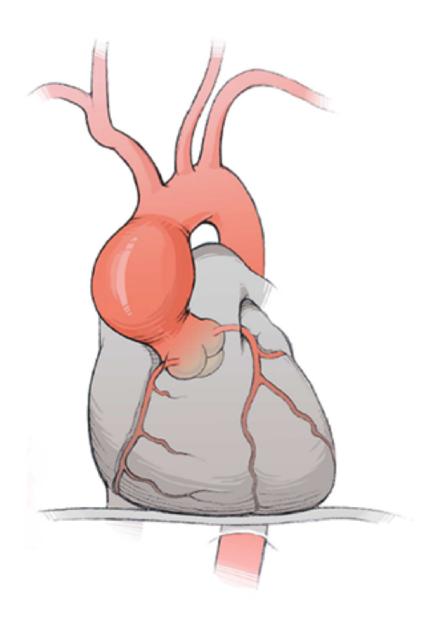






Disclosures

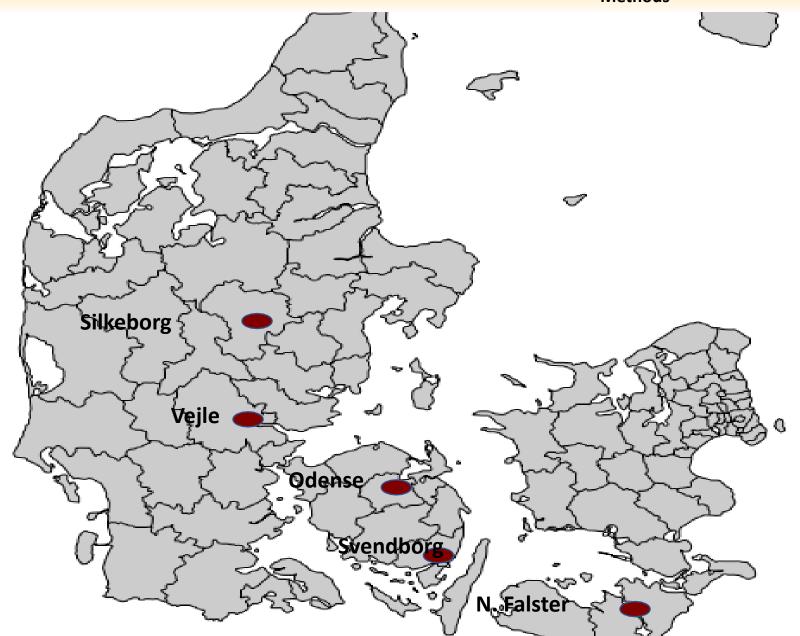
✓ Nothing to declare



Aims

- To report growth rates of the ascending aorta, stratified by baseline diameters:
 - Overall
 - Group A: Normal (<45 mm)
 - Group B: Sub-aneurysmal (45-49 mm)
 - Group C: Sub-aneurysmal (50-54 mm)
 - Group D: Aneurysmal (>55 mm)







2014-2018

<u>DANCAVAS II</u>

65-74 years 60-64 years

N = 45,000 N = 30,000

Randomized I:2 Randomized I:5

4 screening sites 5 screening sites

<u>Up-take of invited participants:</u>

62.4%

Screened participants at baseline

14,235 men

754 women

¹Diederichsen AC et al. The Danish Cardiovascular Screening Trial (DANCAVAS): study protocol for a randomized controlled trial. Trials. 2015;16:554.



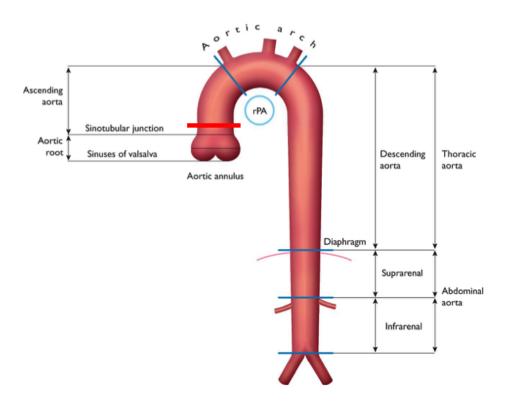


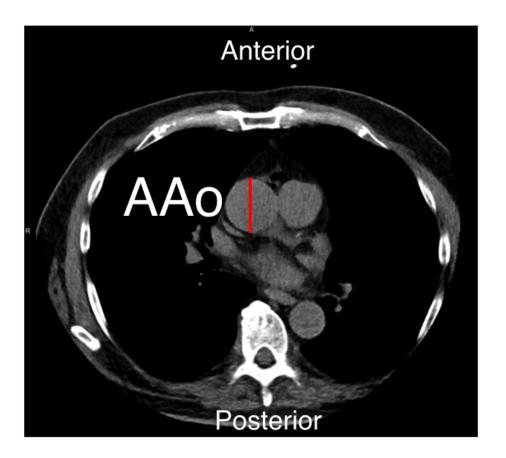
All participants from the pilot-study

All participants with baseline diameters >50 mm

Selected participants with baseline-diameters >45-49 mm

Non-contrast CT-scan (n =)





Study population

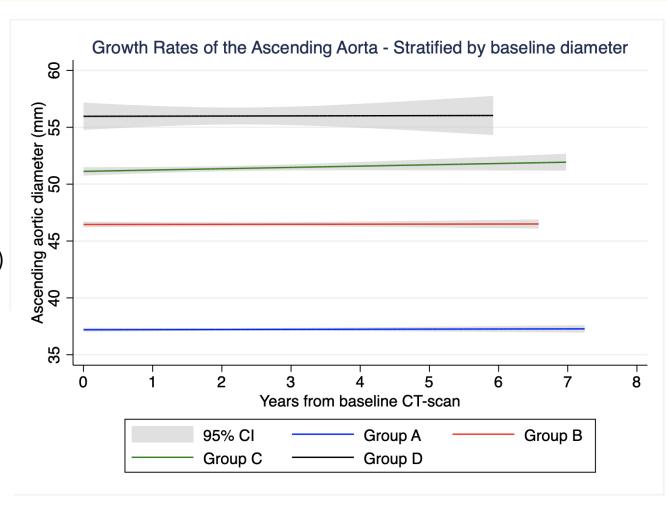
- 2,012 participants >2 CT scans (men= 1554, women=458)
 - Group A: baseline diameters <45 mm (n = 1,749, number of CT-scans = 4,071)
 - Group B: baseline diameters 45-49 mm (n = 187, number of CT-scans = 457)
 - Group C: baseline diameters 50-54 mm (n = 70, number of CT-scans = 308)
 - Group D: baseline diameters ≥55 mm (n = 6, number of CT-scans = 26).
- Mean age at time of inclusion:
 - -69 ± 3 years
- Overall average diameter of AAo
 - $-38 \pm 5 \, \text{mm}$
- Follow-up time from first to last scan
 - 4.1±1.2 years

Results

Estimated adjusted* annual growth of the ascending aorta:

Overall:

0.11 mm/year (95% CI: 0.04—0.18)



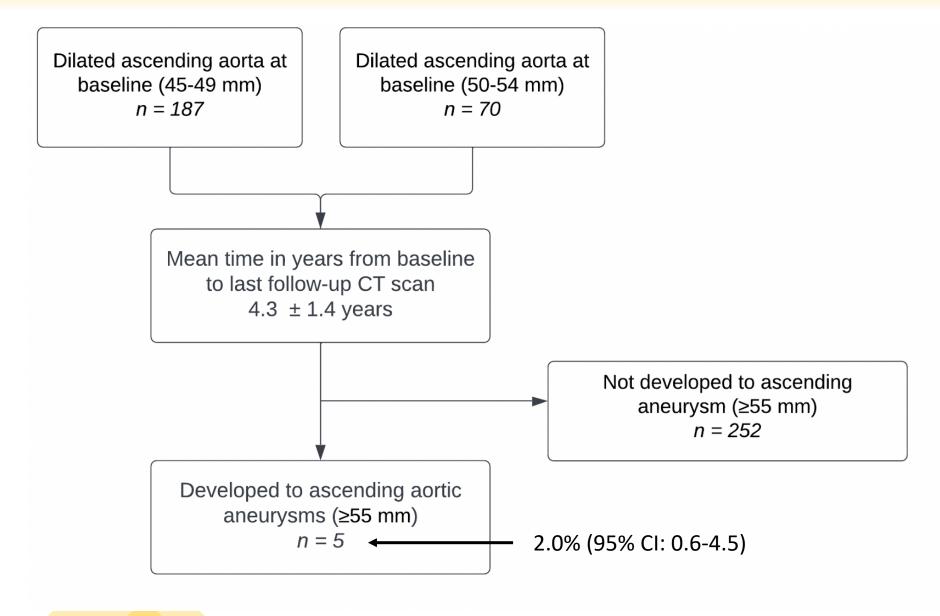
*Adjusted for age and sex

Group A: n = 1,749, number of CT-scans = 4,071

Group B: n = 187, number of CT-scans = 457

Group C: n = 70, number of CT-scans = 308

Group D: n = 6, number of CT-scans = 26



CONCLUSIONS

• Growth rates of the ascending aorta were close to none within 5 years regardless of baseline diameters.

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