RISC Study - Recruiting Centres

- Pla: Palma, Spain
- London: Northwick Park, London
- Amsterdam: VU University Medical Center, Amsterdam
- Newcas: Newcastle upon Tyne, UK
- Lune: Luneburg, Germany
- Odeza: Odense University Hospital, Denmark
- Dunl: Dublin, Ireland
- Pern: Perugia, Italy
- Gern: Grenoble, France
- Krpu: Kuopio, Finland

Study Population

- In the RISC study, 1,146 apparently healthy subjects were recruited in 19 centers in Europe.

Characteristics of Study Population

- In 874 of 1,146 subjects (76%) satisfying the inclusion criteria for the RISC Study it was possible to carry out video-densitometric analysis of undiseased CCA IMC.

Main Determinants of Intima-Media Videointensity

- Fasting glucose (mmol/L):
  - Male: 5.0 ± 0.8
  - Female: 5.1 ± 0.6
- Fasting insulin (pmol/L):
  - Male: 44 ± 14 μmol/l
  - Female: 43 ± 13 μmol/l
- Fasting HDL-cholesterol (mmol/L):
  - Male: 1.5 ± 0.4
  - Female: 1.5 ± 0.4
- Triglycerides (mmol/L):
  - Male: 1.3 ± 0.5
  - Female: 1.3 ± 0.5
- Blood pressure (mmHg):
  - Male: 135 ± 34
  - Female: 136 ± 34
- Age (years):
  - Male: 44 ± 8
  - Female: 44 ± 8

Main Determinants of CCA IMT

- Fasting glucose (mmol/L):
  - Male: 5.0 ± 0.8
  - Female: 5.1 ± 0.6
- Fasting insulin (pmol/L):
  - Male: 44 ± 14 μmol/l
  - Female: 43 ± 13 μmol/l
- Fasting HDL-cholesterol (mmol/L):
  - Male: 1.5 ± 0.4
  - Female: 1.5 ± 0.4
- Triglycerides (mmol/L):
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  - Female: 44 ± 8

Conclusions

In a healthy young to middle-aged European population, an increased videointensity of the IMC parallels an age-related increase in IMT. This finding may indicate that, in the healthy IM, an increase in IMCs can contribute independently to the IMC videointensity, independent of risk factors for ATS. Thus, confirming the hypothesis that "subclinical disease of excessive IM thickness is not necessarily early atherosclerosis."