Association of actigraphy-measured sleep parameters and subclinical atherosclerotic burden: the PESA study



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Declaration of interest

- I have nothing to declare



Conclusions

- Sleeping less than six hours or waking up several times in the night (fragmented sleep) is associated with an increased risk of asymptomatic atherosclerosis.
- Prevalence of metabolic syndrome is directly associated with abnormal sleep patterns, which depicts a population with unhealthier habits.



Background

- ✓ Some evidence suggests that short and long sleep duration, as well as poor quality of sleep, are associated with an increased risk of cardiovascular disease
- ✓ However, large studies evaluating objectively measured sleep parameters and subclinical atherosclerosis assessed by multimodality imaging approach are still lacking.









Purpose and key points about methods



Results







women

Quintile 2 Quintile 1 (Less fragmented sleep)



COMPARISON BETWEEN SELF-REPORTED SLEEP DURATION AND ACTIGRAPHY

Results



<6h of sleep: more atherosclerosis





Results

SLEEP FRAGMENTATION

(Reference: Quintile 1, less fragmented sleep)



More fragmented sleep: more arterial territories with atherosclerosis





Key messages

- Sleep is an important factor influencing cardiovascular health → both <u>short and</u> <u>fragmented sleep</u> could have a role as markers of cardiovascular risk.
- A good night's sleep is important for cardiovascular health
 - <u>Take steps to achieve good sleep hygiene</u>: physical activity, avoid coffee / fatty foods before bedtime...



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