

Appendix B – GRADE Table of the Association Between Metabolic Syndrome and Acute Myocardial Infarction in Young Adults

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Question: Metabolic syndrome as a risk factor for AMI in young adults

Background: Metabolic syndrome is a risk factor for AMI in young adults

Bibliography:

Assessment of evidence							Nº patients		Outcome		Evidence	Importance
Nº of studies	Study design	Risk of bias	Inconsistency	Indirect evidence	Imprecision	Other considerations	Metabolic syndrome	Absence of metabolic syndrome	Relative (95% CI)	Absolute (95% CI)		

Association between AMI and metabolic syndrome (timing of exposure: variation 1 year to 5 years)

4	Observational study	Serious ^a	Serious ^b	Not Serious	Serious	Strong association There was no adjustment for potential confounding factors, which may suggest a spurious effect, and yet an odds ratio of 3.96 was observed.	282 cases 282 controls		OR 3.96 (1.98 - 7.93)	-	⊕⊕⊕○ Moderate ^{a,b,c}	IMPORTANT
							-	26.0%		322 more per 1,000 (from 150 more to 476 more).		

Prevalence of metabolic syndrome by NCEP ATP III criteria (follow-up: variation from 1 year to 5 years)

11	Observational study	Serious ^a	Serious ^b	Not Serious	Not Serious	all potential confounding factors reduced the demonstrated effect	A total of 2,451 subjects were evaluated, of which 1,393 were diagnosed with metabolic syndrome according to the NCEP ATP III criteria. The meta-analysis demonstrated an overall proportion of 54%, with a 95% confidence interval (CI) of 49% to 59%.			⊕⊕⊕○ Moderate ^{a,b}	
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Prevalence of metabolic syndrome by IDF criteria

7	Observational study	Serious ^a	Serious ^b	Not serious	Not serious	all potential confounding factors reduced the demonstrated effect	A total of 2,168 subjects were evaluated, of which 1,266 were diagnosed with metabolic syndrome according to the IDF criteria. The meta-analysis demonstrated an overall proportion of 58%, with a 95% confidence interval (CI) of 49% to 67%.			⊕⊕⊕○ Moderate ^{a,b}	
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CI: confidence interval; OR: Odds ratio

Subtitles

- a. Most studies did not analyze confounders
- b. There is significant heterogeneity between studies
- c. There is a small sample studied and a wide 95% CI