

Conventional risk factors for myocardial infarction in the Maltese population – results from the Maltese Acute Myocardial Infarction (MAMI) study

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This study aimed to determine the influence of some conventional risk factors for Myocardial Infarction (MI) in the Maltese population. Some 429 cases with a first MI, 434 controls and some 190 relatives of cases have been recruited in the Maltese Acute Myocardial Infarction (MAMI) study. Data has been collected through an interviewer-led questionnaire, physical measurements and biochemistry and haematology testing. Odds ratios (OR) were calculated and adjusted (AdjOR) for age, gender, smoking/drinking alcohol, hypertension, diabetes, hypercholesterolaemia and body mass index.

Smoking, diabetes, hypertension, hypercholesterolaemia and a family history of MI are amongst the risk factors associated with an increased risk of MI in the Maltese. Both active and passive smoking are associated with a 3-fold increased risk for MI. Whereas regular drinking (having at least one drink per week for one year) is associated with a decreased risk for MI [AdjOR 0.6 (95% CI 0.4-0.8)], the risk associated with daily binge drinking (six or more drinks in the same occasion) is very high reaching an OR of 5.8 (95% CI 1.2-27.1). The risk associated with diabetes varies depending on the level of control. Uncontrolled diabetes (defined as HbA1C levels above 6.5%) is associated with a 3-fold increased risk of MI [AdjOR 3.0 (95% CI 1.9-4.7)], whereas controlled diabetics showed no increased risk of MI [AdjOR 0.9 (95% CI 0.4-2.1)].

The conventional risk factors in the Maltese population are similar to those of other Western countries. Attention needs to be given to improving glucose control in diabetes. Passive smoking is as strong a risk factor as active smoking and the risk associated with alcohol consumption varies depending on the pattern and frequency of drinking. Regular binge drinking is a particularly strong risk factor for MI.