Drinking patterns and myocardial infarction – a case-crossover analysis

Summary:

Background: There is epidemiological and biochemical evidence that drinking patterns, acute and chronic, influence cardio-vascular disease in general and myocardial infarction in particular. However, many studies on alcohol and myocardial infarction are plagued with methodological problems. Cohort studies cannot include acute exposure before the event; case control studies have problems defining the control group. Thus, a case-crossover study is proposed to examine acute and chronic patterns of consumption in their relation to myocardial infarction.

Workplan: A hospital based case-crossover study on alcohol consumption and myocardial infarction will be conducted using myocardial infarction survivors as subjects. Assessment will be mainly by questionnaire based personal interview. Statistical analysis will proceed from descriptive statistics to conditional logistic regression as suggested by Maclure (1991). Deliverables will include scientific papers as well as recommendations for prevention, based on the results of the study and a systematic analysis of the relevant literature.

Significance/Impact: Myocardial infarction is a major cause of burden of disease in Switzerland. The relationship to alcohol has been oversimplified in the past. This study will yield Swiss data on the relationship which will hopefully influence recommendations for prevention.