great. The aim of this study was to evaluate if any of anthropometric parameters were correlated with the cardiovascular risk by table-risk estimation according with different level of different cardiovascular risk factors.

**Methods:** We have the results of an observational and poblational study in general population (aged 20 to 80 years). We have evaluated the estimated cardiovascular risk according with different methods: Framingham scale (from USA), SCORE (from UE), DORICA (from Spain) and REGICOR (from a regional source). We have calculated the correlation between body mass index (BMI) and the different estimated risk.

**Results:** We have included 502 individuals (465 valids for analysis); female: 67.5 % and male: 32.5 %. Mean of BMI was 27.4 Kg/m2; female: 27 and male: 28.3. Overweight was presented at 38.3 % and obesity at 28.8 %. Others cardiovascular risk factors were: diabetes 8,6 %, arterial hypertension 24,7 %, and dyslipemias: 33,3 %. Mean value of cardiovascular risk was: 3,99 % (Framingham), 2,26 % (Regicor), 2,21 % (Dorica), y 1,63 % (Score). Correlation between BMI and estimated cardiovascular risk was: r=0,389 (Framingham, p=0,001), r=0,393 (Regicor, p=0,001), r=0,389 (p=0,001, Dorica), and r=0,338 (Score, p=0,001).

**Conclusion:** We conclude that there are a relationship between overweight and other cardiovascular risk factors, and also a relationship between BMI and calculated cardiovascular risk by standardized methods. A despite of this, it could be useful to include some anthropometric parameters in regular evaluation of individual cardiovascular risk.

### 47 - Epidemiology of overweight and obesity and related diseases

**EAS-0193.**

**THE INCIDENCE OF METABOLIC SYNDROME IN A GROUP OF OBSESE CHILDREN IN CZECH REPUBLIC**

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**Objectives:** Childhood obesity is becoming a serious worldwide epidemiological issue with metabolic changes, the cornerstones of metabolic syndrome development. Metabolic syndrome (MS) is characterized by absolute insulin resistance (IR), endothelial dysfunction and dyslipidaemia. The aims of the study were to perform anthropometric and laboratory examinations of children with obesity and to determine the incidence of MS based on the diagnostic criteria defined by the IDF, and to evaluate the HOMA and QUICKI homeostatic indexes and determine the incidence of insulin resistance according to these indexes.

**Methods:** 274 obese children from obesitytology ambulance were examined; 146 boys with an average age of 12, and 128 girls, with an average age of 12. Children were referred to the Obesitology Department based on recommendations by their paediatricians. Only children with BMI exceeding 97 were monitored as part of the study. Serum concentration of glucose, total cholesterol, triglycerides, HDL-cholesterol, LDL-cholesterol, blood glucose and insulinemia were set at a biochemical analyser.

**Results:** MS defined according to the IDF criteria for children and adolescents was found in 102 (37 %) of the subjects. The symptoms of IR at QUICKI<0.357 were identified in 85.77 % and HOMA-IR>3.16 in 52.92 % of the subjects. In the MS+ group, the limits were exceeded by 69.61 % of the children, in the MS- group by 43.02 %. It is different at level p<10⁻⁴.

**Conclusion:** According to the HOMA and QUICKI indexes, IR was identified in 52.92 %, out of which it stood at 69.61 % in the group of children with MS. However, it was also identified amongst children who did not fulfill the criteria for insulin resistance. When comparing the groups of obese children with and without MS, we found a statistically more significant difference in the value of HOMA and QUICKI indexes than in the value of simple blood glucose or total cholesterol.

### 48 - Epidemiology of smoking and other behavioural risk factors

**EAS-0534.**

**BEHAVIOURAL ASPECTS OF SMOKING (BOTH PASSIVE AND ACTIVE) AND ALCOHOL CONSUMPTION ON THE RISK OF MYOCARDIAL INFARCTION**

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**Objectives:** To investigate the effect of alcohol consumption and of passive and active smoking on the risk of myocardial infarction (MI).

**Methods:** Data on 429 cases with MI and 434 controls was obtained through an interviewer-led questionnaire as part of the Maltese Acute Myocardial Infarction (MAMI) Study. Regular alcohol drinkers were defined as subjects having at least one drink per week for one year and binge drinkers as having six or more drinks on one occasion this last year. Current smokers were excluded from the analysis of passive smoking. Odds ratios (AdjOR) were adjusted for age, gender, smoking/drinking alcohol, hypertension, diabetes, hypercholesterolaemia and BMI.

**Results:** Regular alcohol drinkers were protected against MI [AdjOR 0.6 (95% CI 0.4-0.8)]. The risk of MI associated with binge drinking varies with the frequency, reaching an AdjOR of 5.8 (95%CI 1.2-27.1) in daily binge drinkers. The AdjOR for current smokers was 3.1 (95%CI 2.0-4.9) and for ex-smokers 1.6 (95%CI 1.1-2.4). Passive smoking also increased the risk of MI [AdjOR 3.0 (95% CI 1.7-5.4)]. Passive smoke exposure in a home setting had a greater deleterious effect [AdjOR 2.8 (95%CI 1.6-4.7)] than exposure in a public setting [AdjOR 1.4 (95%CI 0.9-2.2)]. While periods of 1 hour or longer of passive smoke exposure were found to be deleterious in both the investigated settings, exposure for less than 1 hour was only a risk factor in a home setting.

**Conclusion:** The effect of alcohol consumption on the risk for MI varies from protective to extremely deleterious depending on the frequency of drinking. Daily binge drinking is associated with a high risk of MI. Smoking, even passive smoking, is a risk factor of MI. The effect of passive smoking on the risk of MI is greater in a home than in a public setting.

**EAS-0569.**

**STUDY OF SEEDENTARY TIME DEFINITIONS AND RISK OF METABOLIC SYNDROME IN A MIDDLE-AGED WORKING POPULATION: THE AWHS COHORT**

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**Objectives:** Recent studies have shown that sedentary behaviour (SB) could represent a risk factor for metabolic syndrome (MetS) and cardiovascular disease. However, the results are not consistent driven in part by the lack of standardized definition of SB. The aim of this study was to define the association between sitting time and TV viewing time, the two most common descriptions of SB, and the risk of MetS, independently of physical activity performed.