Poster session 2

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EVALUATION OF BONE FRAGILITY OF JAPANESE WOMEN ACCORDING TO THE RANGE OF AGE: CORRELATION WITH MENOPAUSAL REFERENCE, BONE RELATED INDICATORS AND BIOMARKERS

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Introduction To clarify characteristics of bone fragility in middle-aged Japanese women, we have examined the correlation between bone quality by novel ultrasonic bone densitometry system and several biochemical markers of bone turnover.

Methods Subjects are 121 female applied for this study voluntarily. We evaluated which factors are related with bone quality, bone mineral density or bone elastic modulus as fragile risk in healthy Japanese population. We have measured bone metabolism markers (tartrate-resistant acid phosphatase (TRACP)-5b, bone-specific alkaline phosphatase). For the assessment of examined factors, we have divided the subjects into three subgroups according to the age (Group A: <49, Group B: 50–59, Group C: >60) and investigated the correlation of above-mentioned bone fragile index, biomarkers, and the menopausal reference (pre-menopause, peri-menopause, post-menopause).

Results 90 were included in Group A, 21 in Group B and 10 in Group C. Regarding the menopause status, approximately 90% of subjects in Group A had a menstruation regularly, 25% of subjects in Group B had a irregular menstruation and 60% showed the post-menopause. The bone mineral density and bone elastic modulus showed significantly lower in Group C than in Group A or B. The bone-specific alkaline phosphatase and TRACP-5 **b** were significantly higher in Group B and C than in Group A (p<0.05) whereas no statistical differences of these parameters between Group B and C had been noted.

Conclusion The early screening or objective bone check-up analyses by individual are necessary as an initiative medical prevention of osteoporosis and bone fragility in middle-aged women.

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ALCOHOL CONSUMPTION AND CANCER RISK: A COHORT STUDY IN LITHUANIA

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Introduction Alcohol consumption is related to an increased risk of several types of cancer. The evidence for an association with other cancer types remains controversial. Alcohol consumption is common in Lithuania: 40% of men drank \geq 60 g of pure alcohol on a single occasion at least once per month in 2006. Its effect may be reduced significantly by changing the lifestyle. The present study was initiated to assess the relation between alcohol consumption, other behavioural and metabolic risk factors, and cancer risk.

Methods Two cohorts—Kaunas-Rotterdam Intervention Study and Multifactorial Ischaemic Heart Disease Prevention Study - are included. Kaunas-Rotterdam Intervention Study is a WHO-coordinated prospective cohort study of a random sample of 2447 men aged 45-59, living in Kaunas (Lithuania), who took part in a cardiovascular screening programme in 1972—1974. The Multifactorial Ischaemic Heart Disease Prevention Study was carried out in 1976—1980 among 5933 Kaunas men, aged 40—59. All participants underwent physical examination; information on smoking, alcohol consumption, physical activity, etc was obtained via interview.

Study subjects were followed up for 30 years (1978–2008) using National Cancer and Population Registers.

Results Study design will be presented including preliminary results on the relationship between alcohol consumption and cancer risk. **Conclusions** The strengths of this study are: the extensive data set from two population-based studies (among the first epidemiological studies carried out in the former Soviet Union); uniform and complete prediagnostic data for exposure factors and possible confounders; and long follow-up. The limitation is the unavailable personal identification numbers in Lithuania in the 1970s.

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HAEMOCHROMATOSIS GENE MUTATIONS IN MOROCCAN PATIENTS WITH CHRONIC VIRAL HEPATITIS B AND C

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The implication of haemochromatosis (HFE) gene mutations in chronic viral hepatitis remains controversial. The aim of the present study was to assess the frequencies of the common haemochromatosis gene mutations in Moroccan subjects with chronic viral hepatitis B and C. H63D and C282Y mutations were screened by using polymerase chain reaction followed by restriction fragment length polymorphism analysis in 170 chronic hepatitis B patients, 168 chronic hepatitis C patients and 200 healthy controls. The distribution of allele frequency was then compared between different groups of patients. No subject homozygous for the C282Y mutation was found while 1.76% and 0% were heterozygous for this mutation in HBV and HCV patients, that is, rates not statistically different from those observed in healthy control (2%, 0.129< p<1.000). Similarly, the frequency of the H63D allele was not significantly different between HBV (13.8%) or HCV (14.3%) patients and controls (13.5%, 0.60< p<0.89). Although they do not reach the significance threshold, serum ferritin levels, indicative of body iron content, were higher in HBV or HCV patients than in control individuals with HFE mutations (110.7±43.61 and 149.67±43.52 ng/ml respectively vs 80.84±21.38 ng/ml, 0.229< p<0.607). In conclusion, in Morocco the frequency of the HFE C282Y allele is very low and H63D mutation carriage occurs in <14% of the subjects, a rate similar in chronic hepatitis patients and control individuals. Thus, we assume that the carriage of the common HFE mutations does not represent a risk factor for evolution towards chronic hepatitis B or C in the genetic and environmental context of North Africa.

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ANTIBIOTICS FOR HEPATIC ENCEPHALOPATHY: SYSTEMATIC REVIEW OF RANDOMISED CONTROLLED TRIALS

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Objective To assess the effectiveness of antibiotics in the treatment of hepatic encephalopathy (HE).

Data sources Cochrane Hepato-Biliary Group controlled trials register, Cochrane Controlled Trials Register, MEDLINE, LILACS, SCI Expanded, Embase and http://clinicaltrials.gov/ until January 2010; reference lists of relevant articles and authors were searched. **Review methods** The methodological approach outlined in the Cochrane Handbook was followed. Randomised trials comparing antibiotics with placebo, no intervention, non-absorbable disaccharides, another antibiotic or any other active treatment for HE were included. The primary outcome measures were no improvement of HE and all-cause mortality.

Results Twenty-eight studies were included in this review; most had a small sample size and were methodologically of a low quality. Two studies (N=132) compared antibiotics with placebo or no intervention, reporting no differences in primary outcomes between groups. Twelve studies (N=708) compared antibiotics with nonabsorbable disaccharides, reporting no difference in all-cause mortality (RR=1.11 (95% CI 0.60 to 2.07)) but a marginally significant reduction in the risk of "no improvement" (RR 0.83 (0.69 to 1.00)). In sensitivity analysis, this finding was significant in trials evaluating chronic encephalopathy (RR 0.50 (0.28 to 0.89)) and in trials with co-administration of cathartic agents (RR 0.82 (0.67 to 0.99)). Ten trials (N=336), compared different antibiotic regimens, most evaluating rifaximin and neomycin. Rifaximin reduced the risk of no improvement compared to neomycin, but not significantly so (RR 0.61 (0.34 to 1.09)).

Conclusions Insufficient evidence exists to support or refute the use of antibiotics for HE. Antibiotics were slightly superior to non-absorbable disaccharides at improving HE, with borderline significance and possible effect modification.

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BEHAVIOUR PROBLEMS AND PREVALENCE OF ASTHMA SYMPTOMS AMONG BRAZILIAN CHILDREN

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Introduction Asthma is the most common chronic disease in childhood and has been designated a public health problem due to the increase in its prevalence in recent decades, the amount of health service expenditure it absorbs and an absence of consensus about its aetiology. The relationships among psychosocial factors and the occurrence, symptomatology, and severity of asthma have recently been considered. There is still controversy about the association between asthma and child's mental health, since the pathways through which this relationship is established are complex and not well researched. This study aims to investigate whether behaviour problems are associated with the prevalence of asthma symptoms in a large urban centre in Latin America.

Methods Cross-section study of 869 children between 6 and 12 years old, residents of Salvador, Brazil. The International Study of Allergy and Asthma in Childhood (ISAAC) questionnaire was used to evaluate prevalence of asthma symptoms. The Child Behaviour Checklist (CBCL) was employed to evaluate behavioural problems. **Results** 19.26% (n=212) of the children presented symptoms of asthma. We found good evidence of an association between behaviour problems and asthma symptoms (PR: 1.53; 95% CI 1.13 to 2.08. p=0.007) and this association remained statistically significant after adjustment for sex, age, maternal education, income, parental asthma, minor psychiatric disorders in the mother, Alcohol use, allergens in dust and smoking (PR: 1.43; 95% CI 1.10 to 1.85. p=0.01). **Conclusion** These results suggest an association between behavioural problems and paediatric asthma, and support the inclusion

of mental healthcare in the provision of services for asthma morbidity.

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QUALITY OF LIFE IN BRAZILIAN WOMEN WITH BREAST CANCER: ASSOCIATION WITH THE SOCIAL ENVIRONMENT

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Introduction The incidence of breast cancer is increasing in Brazil. Breast cancer is a major cause of morbidity and mortality with major social and epidemiological impact. The aim of this study is to evaluate the association between social support before treatment for breast cancer and quality of life (QOL) 6 months after starting treatment.

Methods Eligible participants were women who were treated for incident breast cancer in the National Cancer Institute between June 2009 and March 2010. EORTC QLQ-C30 was used to measure QOL. MOS-SSS was used to assess social support prior to treatment. Bivariate analyses of dichotomous variables were carried out and ORs with 95% CI were presented.

Results 195 women were evaluated. Good emotional support was a protective factor for overall health (OR 0.42 (95% CI 0.23 to 0.79)) and scale functionality (OR 0.36 (0.18 to 0.71)). Information support was associated with better global health (OR 0.41 (0.22 to 0.76)), functionality (OR 0.35 (0.18 to 0.70)) and symptoms scale (OR 0.38 (0.18 to 0.77)). Women who reported good emotional support were 70% less likely to report general health problems 6 months after starting treatment (0.13–0.65).

Conclusion The results of this study suggest that a good social environment prior to treatment is positively associated with QOL 6 months after starting treatment in women with breast cancer, underscoring the importance of assessing social environment.

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THE IMPACT OF SOCIAL ENVIRONMENT ON QUALITY OF LIFE IN ELDERLY WOMEN WITH BREAST CANCER IN BRAZIL

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Introduction Studies suggest that social support is associated with improved health outcomes in cancer patients. The relationship between social environmental and health outcomes in elderly Brazilian women with breast cancer has not been investigated. This study aimed to explore the association between social support prior to treatment in a reference centre in Brazil and quality of life (QOL) in elderly women and women under 60 years of age with breast cancer.

Methods This study included women with breast cancer who started oncology treatment at National Cancer Institute between June 2009 and March 2010. The Medical Outcomes Study—Social Support Survey was used to assess social support prior to treatment. EORTC QLQ-C30 and BR23 module were used to measure QQL. Bivariate analyses of dichotomous variables and independent variables were carried out and RRs with CIs of 95% presented.

Results 195 women were examined of whom 46.2% (90) were elderly. Older women who reported good emotional support had lower risk of presenting the worst score of global health (RR 0.69 (95% CI 0.55 to 0.88)), functionality (RR 0.59 (0.38 to 0.91)) and