with prolactinomas as well as weight loss associated with dopaminergic treatment. This work aims to assess the prevalence of obesity in patients with macroprolactinomas, before and after treatment with bromocriptin, and identify some determinants of weight variation during follow-up.

Methods: Medical records of patients with macroprolactinomas, treated with bromocriptin for ≥2 years, were retrospectively reviewed. Analyzed: tumor size; prolactin; anthropometric data; persistent hypogonadism and bromocriptin doses. Statistical analyses:SPSS(21).

Results: There were 87 eligible patients, 53 women, with 40.67 ± 15.44years. Initial obesity prevalence was 41.3% [class I:24,1%; class II:11,5%; class III:5,7%]. One third of the patients (n = 29) had persistent hypogonadism, although these didn't present initial higher prolactin levels or an association with obesity (p > 0.05). The median bromocriptin cumulative dose was 15432.78 (1825–81395)mg, over 8.04 ± 5.56years. Most patients (89.7%) normalized prolactin levels. After treatment more than half of the patients (n = 47) had lost weight, and there was a global BMI reduction (29.0 ± 5.0 vs. 28.3 ± 4.9kg/m^2; p = 0.014). Final obesity prevalence was 30.1% [class I:20.5%, class II:5.5%; class III:4.1%]. BMI wasn't correlated with prolactin or bromocriptin cumulative dose (p > 0.05), although prolactin normalization quadrupled the odds of losing weight (OR:4.65; p = 0.031).

Conclusion: There was a high prevalence of obesity in patients with macroprolactinomas and a significant weight reduction after treatment with bromocriptin. Despite the main mechanisms remain undetermined, patients that achieved normal prolactin levels were more likely to lost weight. These findings reinforced the metabolic importance of an appropriate treatment of patients with macroprolactinoma, particularly the obese one.

T4:PO.069

Prevalence of metabolic syndrome and associated behavioural factors in Tunisian adolescents

Hajer Aounallah-Skhiri[1], Jalila El Ati[2], Pierre Traissac[3], Agnès Gartner[3], Houda Ben Gharbia[2], Mohamed Hsairi[1], Chiheb Ben Rayana[2], Francis Delpeuch[3]

[1]INSP (National Institute of Public Heath), Tunis, Tunisia & SURVEN Unit (Nutritional Surveillance and Epidemiology in Tunisia research laboratory)
[2]INNTA (National Institute of Nutrition and Food Technology), Tunis, Tunisia & SURVEN Unit (Nutritional Surveillance and Epidemiology in Tunisia research laboratory)
[3]IRD (Institut de Recherche pour le Développement), NUTRIPASS Unit, IRD-UM2-UM1, Montpellier, France

Introduction: Chronic diseases related to the modernisation of dietary patterns and to changing lifestyles are increasing rapidly in North Africa, in youth among others. The aim of this study is to assess the prevalence of Metabolic Syndrome (MetS) among urban adolescents and its relationship with behavioural risk factors.

Methods: Cross-sectional study (2009/2010) in Great Tunis (93% urban) among a random sample of 1258 adolescents 10–19y (585 boys, 673 girls). MetS defined according to IDF criteria (2007). Food intake estimated by retrospective three-day dietary intake records; physical activity measured by a validated frequency questionnaire; sedentary activities are those with metabolic cost<=1.5 MET. Adjusted (for physiologic, socio-demographic and economic factors) associations of MetS and its components with energy intake and sedentary behaviour were assessed using logistic regression models.

Results: prevalence of MetS was low (1.6% [0.9–2.8]), but higher among girls (2.4% [1.3–4.7]) vs. boys (0.6% [0.3–1.6]). Contrarily to the other MetS components for which no difference was found, abdominal obesity was more frequent among girls (22.5% [18.3–27.3]) vs. boys (6.0% [4.0–9.0]). After adjustment on gender, age, puberty, education, economic level, size of household and profession of household head, MetS and its most important component were associated with daily energy intake : MetS: 3rd tertile vs. 1st OR = 5.7 [1.3–24.4] ; abdominal obesity: 2nd tertile vs. 1st : OR = 2.5 [1.2–5.0]; 3rd tertile vs. 1st : OR = 9.3 [4.7–18.3].

No significant association was found between sedentary behaviour and MetS or its components.

Conclusion: These findings justify the necessity of promoting healthy diet behaviour among youth in order to prevent abdominal obesity and related diseases.

T4:PO.070

obesity and overweight among secondary schools in Dubai, prevalence and associated factors

Hamid Hussain, et al.

Dubai health authority

Introduction: Obesity is a major public health problem all over the world. It has become a global epidemic in both industrialized and developing countries. The dramatic increase in the prevalence of obesity among school children is associated with significant health and financial burdens

Methods: Multistage stratified random sample was carried out in secondary schools in Dubai. a self-administrated questionnaire used, included personal data, family history, and dietary habits. Weight and height were measured .The sample amounted to 1186 students

Results: prevalence of overweight and obesity was 26.7%, 12.2% respectively. Male showed higher percentage of overweight & obesity (30.1% & 15.4% respectively) than females (23.1% & 8.9% respectively, p < 0.05). Non- national experienced a higher percentage (29.2% & 12.8% respectively) compared to nationals (20.2% & 10.6% respectively) P < 0.05. grade ten were more overweight or obese compared to those in grades eleven or twelve (30.8%, 25.2% & 22.1%) and for obesity (15.3%, 10.4% & 9.7% respectively). Stepwise logistic regression analysis delineated five predictors for overweight and obesity in order: eating fast food regularly, positive family history of obesity, male gender, those in tenth grade and non- national students; (OR = 1.44, 1.51, 1.79, 1.72, and 1.41 respectively

Conclusion: overweight and obesity are highly prevalent among secondary school students in Dubai. Urgent and effective community intervention programs are highly required in order to combat this problem

---

T4:PO.071

Influence of S- adenosylmethionine in fructose-induced hepatic injuries

Kameliya Bratoeva[1], Ganka Bekyarova[1], Mariya Tsaneva[2]

[1]Division of Pathophysiology, Department of Physiology and Pathophysiology, Medical University-Varna, Bulgaria
[2]Department of General and Clinical Pathology, Medical University – Varna, Bulgaria

Introduction: Fructose is an important risk factor in the development of fatty liver. This is related to the de novo hepatic lipogenesis, excess production of free radicals and changes in redox balance. It is known that the overcoming of antioxidant protection in the cells leads to a change in the redox enzyme activity, mitochondrial dysfunction and cell death by apoptosis. The aim of this study was to investigate the influence of S-adenosylmethionine (SAM-e) administration in fructose-induced hepatic injuries.

Methods: The study was performed on male Wistar rats divided into 3 groups (n = 7): control, fructose fed (35%,16 weeks), fructose fed and treated with SAM-e (20 mg/kg b.w.,16 weeks). Liver injury was assessed biochemically and histologically together with hepatic Bcl-2 family proteins expression.

Results: The results showed microvesicular steatosis, increase liver MDA levels (p < 0.05), significantly elevated ratio Bax/BCL-2 by 92% (p < 0.01), reduced total thiol levels (p < 0,05) in the fructose-fed rats compared to the control group. In the group treated with SAM-e steatosis, MDA levels (p < 0.001) the ratio Bax/BCL-2 were significantly reduced