GP220 PRIORITY FOR COMPLEMENTARY FEEDING START COUNSELING AND RELATED NUTRITIONAL RECOMMENDATIONS FROM PEDIATRICIANS DURING THE FIRST YEAR OF LIFE

¹Paolo Brambilla*, ¹Marina Picca, ²Gaetano Bottaro, ¹Marco Giussani, ³Roberto Buzzetti, ⁴Paolo Becherucci. ¹Società Italiana delle Cure Primarie Pediatriche, Milano, Italy; ²Società Italiana delle Cure Primarie Pediatriche, Catania, Italy; ³Epidemiologia Clinica, Bergamo, Italy; ⁴Società Italiana delle Cure Primarie Pediatriche, Firenze, Italy

10.1136/archdischild-2019-epa.279

Introduction and aim An early education to avoid an excessive protein and salt consumption is now considered crucial for obesity and hypertension prevention. Complementary feeding (CF) practices are debated among Pediatricians, first of all about which criterion should be considered between nutritional needs (NN) or developmental readiness (DR) for CF start. The aim of the present study was to analyze if timing of CF, modalities, and nutritional advices during the first year of life were related with the criterion considered for CF start among Pediatricians.

Methods An online Survey was conducted in march 2018 among Family Pediatricians in Italy investigating the criterion chosen for CF start, timing, method of feeding and specific dietary practices. A Good Nutritional Practice (GNP) was acknowledged to those Pediatricians who declared to give advices for meat quantity and salt consumption during the first year of life respect to those who declared to demand any decision to parents.

Results Participation rate was 43.3% (350 of 808) among active members of the Italian Society of Primary Care Pediatricians (SICuPP), 213 of them (60.9%) choose DR and 137 (39.1%) NN as CF starting criterion. About 75% declared to counsel CF start between 5 and 6 months of age, 17% before 5 months and 8% after 6 months. Concerning CF modalities, 38% suggested Traditional pureed foods spoon feeding following written recommendations (T), 13% suggested a sort of Baby-led weaning (B) while the majority (49%) declared to use both according with family characteristics. Concerning specific advices, 89% declared to suggest meat quantity during the first year of life and 91% suggest to introduce added salt only after 12 months of age. A GPN was followed by 85% of them.

NN Pediatricians had a significantly earlier CF starting, an higher use of T modality, meat quantity and added salt advices, and followed more frequently a GNP respect to DR Pediatricians (all $p < 0.0001$).

Conclusions Our data suggest that the criterion most considered for CF start might be associated with timing, modality and nutritional advices during the first year of life. Pediatricians following the developmental readiness position for CF start could less frequently give to parents adequate nutritional advices for hypertension and obesity prevention. An effort aimed to integrate new CF practices with adequate nutritional recommendations should be strongly encouraged.

GP221 INFLUENCE OF CONTROLLED PHYSICAL ACTIVITY ON SERUM ADIPOKINES CONCENTRATION IN OBESE CHILDREN

¹Anna Wasilewska*, ¹Piotr Protas, ¹Agnieszka Rybi-Szuminska, ¹Katarzyna Taranta-Janusz, ²Marian Stelmach, ¹Elżbieta Kuroczycka-Saniutycz, ¹Marta Lemiesz. ¹Medical University of Białystok, Białystok, Poland; ²Pope John Paul II State School of Higher Education, Biała Podlaska, Poland

10.1136/archdischild-2019-epa.280

Introduction The number of obese people is increasing, and its negative impact on the people's health is significant. The relationship between physical activity and obesity is still under investigation. One of components responsible for the metabolism are adipokines such as adiponectin or adiponectin. The purpose of this study was to investigate, whether the controlled physical activity affects the concentrations of adipokines and may play role in treatment of obesity in children.

Material and Methods 34 obese children aged 5–18 years were involved to the dynamic prospective study. The reference group consisted of 16 healthy children. The participants were informed about recommended physical activity, adjusted for sex, age, and degree of overweight. They were equipped with exercise recorder for a period of 8 weeks. Before start of the study and after 8 weeks of effort, has been made anthropometric measurements, electrical bioimpedance and blood serum was collected. Adiponectin and adiponectin concentrations in serum were determined by ELISA.

Results In the study group, 22 children decreased BMI Z-score. Average BMI Z-score has decreased from 2.75 ± 0.43 at baseline to 2.51 ± 0.31 at the end of the study ($p < 0.05$). In the whole study group, there was no statistical significant differences in the concentrations of adiponectin and adiponectin compared between study points and the control group. In contrast, significantly increase the concentration of adiponectin after 8 weeks, in group of patients who have lowered their BMI Z-Score (38.84 ± 20.29 vs. 64.54 ± 40.45 pg/ml, $p < 0.01$).

Conclusions Controlled physical activity leads to reduction of obesity in children and increases serum adiponectin concentration, which may play role in prevention of obesity complications.

GP222 CLINICAL AND METABOLIC PARAMETERS IN GIRLS-CARRIERS OF LEPR RS1137100 WITH ANDROID AND GYNOID OBESITY

Ekaterina Sheneman, Tatyana Bairova, Ksenia Ilevleva, Lyubov Rychkova*, Olga Bugun. Scientific Centre for Family Health and Human Reproduction Problems, Irkutsk, Russian Federation

10.1136/archdischild-2019-epa.281

Leptin is a peptide hormone of adipose tissue regulating energy metabolism. Numerous studies indicate LEPR gene contribution to obesity. There are no data on the role of LEPR gene rs1137100 polymorphism in development of android and gynoid types of obesity.

Aim To compare the clinical and metabolic parameters in adolescent girls with android and gynoid obesity types - carriers of different genotypes of LEPR gene rs1137100 polymorphism.

Materials and Methods We examined 88 Caucasian girls (aged 15.8 ± 0.09) with body mass index SDS (SDS BMI) ≥ 2.0 , living in Eastern Siberia (Russia). The SDS BMI ≥ 2.0 girls were divided in 2 groups: 41 girls (aged 15.4 ± 0.1) with android obesity (waist measurement $97.3 \pm 1.7\%$) and 47 girls with gynoid (waist measurement $86.1 \pm 1.1\%$), (aged 15.5 ± 0.1). We measured circumference and skinfold thickness in following areas: blades, chest, belly, thighs, triceps, and biceps. We investigated metabolism parameters: glucose, insulin, leptin in serum; insulin sensitivity index (HOMA-IR) was calculated. We tested frequency of LEPR rs1137100 polymorphism in girls with android and gynoid obesity.