

Methods The study included 72 final year medical students in the academic year 2010–2011. The students were asked to freely evaluate their selves in the final theory, traditional long case and OSCE in pediatrics by putting a score representing their performance in these exams. The students self-rating was compared with the actual scores these students obtained.

Results There was a significant correlation between students self-rating and the actual students scores in the final exam in pediatrics.

Conclusion In the presence of a consensus among departments on the level of knowledge and skills that need to be mastered by students during undergraduate medical education, and the implementation of active training program; students self evaluation could be used as an additional method of students evaluation and assessment.

1021 CHARACTERIZATION OF KEY ENZYMES OF THE STEROID BIOSYNTHESIS IN PRETERM INFANTS

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Background A suspected cause for relative adrenal insufficiency in preterm infants is the immaturity of adrenal key enzymes for steroid synthesis (β -hydroxysteroiddehydrogenase (β -HSD), 11β -hydroxylase (11β -HYD)). The fetus lacks β -HSD activity until the last trimester (requiring placental progesterone) and active cortisol concentration is regulated by the final step of synthesis 11β -HYD and inactivation by 11β -hydroxysteroiddehydrogenase type 2 (11β -HSD2). In this study we estimate enzyme activity in preterm infants and compare steroid profiles of preterm infants < 30 weeks gestational age (GA) and above.

Method A 24 hour profile of glucocorticoid metabolites was obtained in the urine of 61 preterm infants of < 30 wks GA and 81 preterm infants > 30 wks GA using gaschromatography-massspectrometry (GC-MS).

Results Patients < 30 wks GA in contrast to the patients >30 wks displayed a significant increase in β -HSD activity from day 3 to week 3. 11β -HYD activity decreased significantly until third week of life, this trend was stronger in preterm infants < 30 weeks. In patients < 30 weeks GA, 11β -HSD activity decreased postnatally until the third week of life to the level of more mature patients.

Conclusion Preterm infants < 30 weeks showed significant changes in enzyme activity, possibly a sign of maturation processes, that are not observed in patients > 30 weeks GA.

There was no significant difference between ill and well preterm infants, potentially signifying insufficient cortisol response and validating further study in stress response at different stages of maturation.

1022 IMMUNOREGULATORY MECHANISMS OF CHILDS FOOD IN THE CHILDREN WITH DISPEPSIA SYNDROM

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Background We studied the influence of child's food on the state of homeostasis in the children and developed recommendations by correction of dyspepsia syndrom.

Materials Were observed 27 children with dyspepsia syndrom in early-aged children (2–6 months), who used nutritive correction by therapeutic baby's formula «Humana HN (Therapeutic Diet) + MCT (Medium Chain Triglycerides)».

Results The positive dynamics of use of child's food was confirmed of the clinical symptoms at duration of Dyspepsia syndrome, condition of peripheral blood, level of electrolyte exchange, hormonal tests, cytokines levels and production of endogenous $IF-\gamma$. The level of IL-2 (2.76 ± 0.48 to 3.36 ± 0.53 mkmol/l) had tendency to the increase. That presents stimulation of proliferation and differentiation of activated T-cell to Thlimphocytes. Biological activity of IL-2 presence role of the typical TGF of cells of limphatic mieloid complex. The levels of IL-4 also have a tendency to the decline in the reference dates (16.48 ± 1.78 to 15.73 ± 1.48 mkmol/l). IL-4 is known to increase the level of production of IgE, what is confirmed the decline of level of IgE in our researches. Level of $IF-\gamma$ has a tendency to the increase (38.9 ± 1.74 to 40.1 ± 1.24 mkmol/l) and level of IgA has same tendency too. What stipulated an increase of immunoregulatory mechanisms of child's organism.

Conclusion Used of child's food provides more active differentiation of cells of granulocytic and monocytic pool. An increase the level of IgA testifies to the improvement of local immunity by an obstacle fixing of bacteria and viruses on mucus shells. The values of IgE decreased, what represented hypoallergic influences of child's feeding.

1023 SALT CONSUMPTION, FRUIT AND VEGETABLE INTAKE AND LONG-TERM BLOOD PRESSURE DEVELOPMENT IN HEALTHY CHILDREN AND ADOLESCENTS

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Background Low salt consumption and high fruit & vegetable intake (FVI) have been shown to reduce blood pressure (BP) in adults. To date, longitudinal data regarding the relative effect strength of FVI and salt intake (SI) on BP development during growth is not available. We aimed to characterize the long term concomitant influences of SI and FVI on the BP development during childhood and adolescence.

Methods 435 healthy children and adolescents (aged 4–18 years), who had at least 3 repeated measurements of BP, 24-h urine collections, and 3-d weighed dietary records, were examined. Systolic BP (SBP) and diastolic BP (DBP) were determined by mercury sphygmomanometer using auscultatory method. SI was estimated by measurement of 24h-sodium-excretion.

Results SI tended to be positively associated with SBP ($p<0.1$) in the pubertal group (aged 11–18yrs). An increase of 1g/d of SI was related to an increase of 0.2 mmHg SBP. SI was not associated with DBP or SBP in prepubertal children (aged 4–10yrs). FVI was negatively associated with SBP ($p<0.05$) and DBP ($p<0.1$, trend) in 4–10 yr-olds. The increase of SBP by a 100 g/d decrease in FVI was comparable with the increase of SBP by a 1g/d increase in SI. No FVI effect was observed in 11–18 yr-olds.

Conclusion Increased FVI may already be beneficial for BD development during childhood. Unfavorable changes of BD with higher SI were not yet observed during childhood; seem to develop however during adolescence.

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1024 INFLUENCE OF BLOOD PRESSURE UPON REGULATION OF LIPID METABOLISM IN OBESE CHILDREN

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