**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.

---

**Background** A suspected cause for relative adrenal insufficiency in preterm infants is the immaturity of adrenal key enzymes for steroid synthesis (3β-hydroxysteroiddehydrogenase (3β-HSD), 11β-hydroxylase (11β-HYD)). The fetus lacks 3β-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 <30 wks GA and ≥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 3β-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.

**Background** We studied the influence of child’s food on the state of homoeostasis in the children and developed recommendations by correction of dyspepsia syndrome.

**Materials** We observed 27 children with dyspepsia syndrome 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-γ. The level of IL-2 (2.76±0.48 to 3.56±0.53 nmol/l) had tendency to the increase. That presents stimulation of proliferation and differentiation of activated T-cell to Thlymphocytes. Biological activity of IL-2 presence role of the typical TGF of cells of limbphatic 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 nmol/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-γ has a tendency to the increase(38.9±1.74 to 40.1±1.24 nmol/l) and level of IgA has same tendency too. That 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.

---

**Background** Supported by BMELV [grant number 2811HS007].

**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). VFI 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.

Supported by BMELV [grant number 2811HS007].