^{1,2}MI Alves, ²C Patraquim, ³F Correia, ²S Martins, ²A Antunes, ²T Pontes, ⁴R Maré, ^{2,5}H Antunes. ¹Serviço de Pediatria, Centro Hospitalar São João, Porto; ²Unidade Adolescentes, Serviço de Pediatria, Hospital de Braga, Braga; ³Serviço de Pediatria, Centro Hospitalar Alto Ave, Guimarães; ⁴Serviço de Neurologia, Hospital de Braga, Braga; ⁵Instituto de Ciências da Vida e da Saúde (ICVS), Escola de Ciências da Saúde da Universidade do Minho, Laboratório Associado ICVS/3B's, Braga/Guimarães, Portugal

Background The segmental spinal cord syndrome is defined clinically as a neurological injury (incomplete or complete) sensory, motor and autonomic.

Results 13 year old female, previously healthy with a sudden onset of severe pain in the inferior limbs, with loss of strength and sensitivity. No history of fever, recent trauma, infection, vaccination or similar episode. The physical examination revealed areflexic flaccid paraplegia, abolished postural sensitivities, painful hypoaesthesia with sensitive level at T8, bilateral indifferent cutaneous plantar reflex response and vesical globe.

A brain and spinal cord magnetic resonance imaging (MRI) study showed a discreet hyperintensity of the conus, and cerebrospinal fluid analysis was normal. She was hospitalized admitting a possible diagnosis of transverse myelitis and medicated with methylprednisolone intravenously. Due to the absence of clinical improvement, at day five MRI was repeated showing extensive hyperintensity of the conus with restricted diffusion, which extended to the level of T10, diagnostic hypothesis of acute transverse myelitis or acute ischemic injury was made. An etiological study was conducted presenting heterozygosity for Factor V Leiden. On day 32, after submission to physiotherapy, with slight improvement of proximal weakness in the lower limbs, a new MRI showed spinal cord atrophy.

Conclusions In this case, the main challenge is to establish the diagnosis and its etiology. Clinically, transverse myelitis is the most probable diagnosis although by imaging, one cannot exclude spinal cord infarction. Regardless of this issue, the overall prognosis, conditioned by severe initial dysfunction and no recovery in the first 24 hours, is unfavorable.

457 SELF-ASSESSMENT OF APPEARANCE AND USING OF SLIMMING SUPPLEMENTS AND ERGOGENIC AIDS AMONG POLISH STUDENTS FROM JUNIOR HIGH SCHOOLS

doi:10.1136/archdischild-2012-302724.0457

¹E Kolarzyk, ²J Joško, ²J Kasperczyk, ¹A Ostachowska-Gąsior. ¹Department of Hygiene and Dietetics, Jagiellonian University, Medical College, Krakow; ²Department of Environmental Medicine and Epidemiology, Medical University of Silesia, Zabrze, Poland

Dynamic physical and psychological changes connected with adolescence are associated with focusing on appearance. The difference between the imagine figure and real appearance can become a source of frustration and dissatisfaction.

The aim Assessment of body weight acceptance and different actions aiming at appearance improvement among Polish students from junior high schools.

Methods The examinations included 986 students from junior high schools (551girls and 435 boys) at the mean age 13 years and BMI 19.28 ± 2.85 (girls) and 19.90 ± 4.51 (boys). An anonymous standardized questionnaire concerning nutritional behaviors was used.

Results Dissatisfaction with body mass and general appearance was declared by 31.4% boys and 40.6% girls. The majority of these girls used different weight-loss diets (reduction, low-carbohydrate, protein, yoghurt and fruit diets) and nonconventional diets such as Atkins' and South Beach. Supplements which stimulate fat tissue burn, metabolic process and thermogenesis and such products as Alli, Bio CLA, Linea and Therm Line II were the most popular. The boys declared taking the ergogenic aids (vitamin and mineral preparations) and supplementation with protein or carbohydrate. The reduction of body mass was the goal for 8% of boys and they also decided to start a weight-loss diet.

Conclusions Low level of self-assessment and lack of appearance acceptance may lead to disturbances with physical and mental health.

In Poland dietary supplements and nutrients are sold without prescription even in filling stations and supermarkets and we afraid that young people will abuse them to create their figure according to their imagine.

458 THE WAY OF NUTRITION OF POLISH JUNIOR HIGH SCHOOLS PUPILS

doi:10.1136/archdischild-2012-302724.0458

¹E Kolarzyk, ²J Joško, ¹A Ostachowska-Gąsior, ³J Kasperczyk. ¹Department of Hygiene and Dietetics, Jagiellonian University, Medical College, Krakow; ²Department of Environmental Medicine and Epidemiology, Medical University of Silesia, Zabrze; ³Department of Environmental Medicine and Epidemiology, Medical University of Silesia, Krakow, Poland

The proper nutrition is important at every period of human life but particularly in adolescence.

The aim Estimation of the frequency of regular consumption of particular meals and the characterization of nutritional habits of junior high schools pupils.

Methods The examinations included 986 students from junior high schools (435 boys and 551 girls) at the mean age 13 years and BMI 19.28 ± 2.85 kg/m² (girls) and 19.90 ± 4.51 kg/m² (boys). An anonymous standardized questionnaire concerning nutritional behaviors was used in the study.

Results Breakfast was eaten regularly by 71.7% (67.6% girls and 76.8% boys); second breakfast: 36.7% (38.1% girls and 34.5% boys); lunch: 87.8 (84.9% girls and 91.0% boys); desert 22.1% (21.7% girls and 22.3% boys); supper: 73.9% (66.5% girls and 82.8% boys). Basic meals were more often omitted by girls than by boys. 33.6% of girls and 29.0% of boys eat something among the main meals. It should be pointed out that 25% of these young people eat their meals alone. Nearly half of the examined group eat chips, cakes, sweets like Snikers, Mars etc. and drink cola, sprite, peps. When pupils were asked about the frequency of fast food consumption 2/3 of them answered "sometimes". The answer "never" was chosen by 19.1% of girls and 18.2% of boys.

Conclusion The examined group of pupils showed many nutritional mistakes and the way of nutrition becomes far from traditional Polish pattern and becomes similar to nutritional model present in USA and West Europe.

459 FAMILY FACTORS MODIFYING THE EATING DISORDERS OF YOUNG PEOPLE IN POLAND

doi:10.1136/archdischild-2012-302724.0459

¹J Josko, ²E Kolarzyk, ¹J Kasperczyk, ¹U Marcinkowska, ¹K Lau, ¹M Tyrpień, ³K Helewski. ¹Chair and Department of Medicine and Environmental Epidemiology, Medical University of Silesia, Zabrze; ²Department of Hygiene and Dietetics, Jagiellonian University, Medical College, Krakow; ³Department of Histology and Embryology, Medical University of Silesia, Zabrze, Poland

Background and Aims The independent predictors of eating disorders model, characteristic of the families whose children suffer from anorexia is to prefer to be "good parents" than marriage ties and close family relationship. In those families the influence of a father on the premorbid and the accompanying disease personality of children is underestimated. The role of fathers is especially important during daughters' adolescence, who need then their full acceptance. The aim of the study: is there a relationship between age and education of parents and behaviors that may precede the incidence of anorexia.

Methods 1050 middle school students (13.8 ± 0.98 year old) from Poland, have been examined using anonymous standardized

questionnaire. Different behavior of children has been evaluated: perfectionism, ambition, self-esteem, control of food portions eaten, stress-eating as well as paying attention to other's opinion and appearance.

Results Daughters of younger fathers significantly more often ate in response to worries or problems ($p=0.017$) and had poorer self-esteem compared to the daughters of older fathers ($p=0.0013$). The sons of fathers with higher education significantly more often pointed out slim figure as important ($p=0.0089$). Daughters of fathers with primary education often had low self-esteem compared to their friends ($p=0.014$).

Conclusions

1. The independent predictors of eating disorders father's age and education has been an important modifying factor. Children (especially daughters) of the young, uneducated fathers have more often shown abnormal behaviour and habits in nutrition, indicating anorexia.
2. Mother's age and education have not affected the eating disorders of their children.

460 ASSOCIATION BETWEEN OBESITY AND DEPRESSION IN EMIRATI ADOLESCENTS

doi:10.1136/archdischild-2012-302724.0460

F Al Dhaheri, N Al Jaber, S Al Eisaei, N Al Shehhi, S Al Shamisi, M Al Hamez, F Walid, S Yousef, S Shah. *Faculty of Medicine and Health Sciences, United Arab Emirates University, Abu Dhabi, United Arab Emirates*

Background Overweight, obesity is rapidly increasing among children in United Arab Emirates (UAE). This study aimed to determine the prevalence of depression and its relation with obesity in adolescents.

Methods The study sample included 1018 adolescents (12–18 years) from a random sample of 8 schools out of 114 schools in Al Ain district of Abu Dhabi Emirate in UAE. We estimated self-reported symptoms of depression using the Arabic Beck's Depression Inventory (BDI). BMI $\geq 85^{\text{th}}$ and $\geq 95^{\text{th}}$ percentiles were used to define overweight and obesity according to the 2000 CDC growth charts.

Results The prevalence of depression according to the BDI (cut-off point: 19) was 10.7%. Girls were more likely (OR=3.97, 95%CI: 1.11–14.23) to have depression (12.2%) compared to boys (7.0%). A high proportion of adolescents (33.8%) were overweight and obese. There was a significant ($p=0.047$) correlation between overweight and obesity and depression after adjustment for gender, age, ethnicity and income level.

Conclusion There is disparity in prevalence of depression by gender. There is significant correlation between overweight, obesity and depression irrespective of age, gender, ethnicity and income.

461 RADIOLOGICAL ASSESSMENT OF CAPITAL REALIGNMENT SURGERY FOLLOWING SLIPPED CAPITAL FEMORAL EPIPHYSES (SCFE)

doi:10.1136/archdischild-2012-302724.0461

¹T Keith, ²J Balakumar. *¹Orthopaedics; ²Royal Childrens Hospital, Melbourne, VIC, Australia*

Introduction The pinning in situ of slipped capital femoral epiphysis (SCFE) is the accepted gold standard treatment. However the resultant deformity from pinning of severe SCFE creates an altered femoral head-neck relationship. This contributing to femoroacetabular impingement and eventually the development of osteoarthroses.¹

The principal investigator has previously published on the use of two radiographic indices, alpha angle and displacement from Kleins line, surrogates of impingement, to evaluate the femoral head neck

relationship in mild to moderate grade severity SCFE's. treated by pinning in situ.²

Subcapital realignment surgery through surgical hip dislocation has been performed in moderate to severe SCFE in an attempt to restore femoral head neck geometry.³ We describe the use of the two previously recognised radiographic parameters in the setting of capital realignment for the treatment of severe SCFE.

Aims To assess the radiological outcomes; alpha angle, and displacement from Klein's line in patients having undergone capital realignment, compared with normative data.

Methods We retrospectively reviewed 11 patients (6 males, 5 females mean age 12.2 years with moderate to severe (1 moderate: 10 severe) SCFE having undergone capital realignment between 2009 and 2011.

Results Alpha angles restored to normal range in all patients. Klein's line offset was restored to positive displacement in 7 patients, with 3 patients noted to demonstrate a new radiographic finding termed pistol grip type deformity.

Discussion The radiographic parameters of alpha angle and Klein's line offset are useful in quantifying the restoration of proximal femoral anatomy following capital realignment.

462 CLASS III GYNecomASTIA IN PEDIATRIC AGE: A NEW MODIFIED SURGICAL TREATMENT

doi:10.1136/archdischild-2012-302724.0462

¹N Zampieri, ²R Castellani, ³S Modena, ⁴F Camoglio. *¹Department of Anesthetic and Surgical Science, Pediatric Surgical Unit, University of Verona, Policlinico G.B. Rossi; ²Department of Surgery, 'Casa di Cura San Francesco' Hospital; ³Casa di Cura San Francesco; ⁴Department of Surgical Sciences, Pediatric Surgical Unit, University of Verona, Policlinico G.B. Rossi, Verona, Italy*

Background Prepubertal ginecomastia is an extremely rare condition usually requiring surgical treatment, especially in case of class III ginecomastia. This study presents cases treated with a new surgical treatment.

Methods Five patients were treated at the Authors' Unit for class III ginecomastia between January 2010 and December 2011 using a modified technique of periareolar incision. Aesthetic results and possible complications of this technique were then observed.

Results All patients were properly treated without the need of further surgery for skin resection. One patient developed stroma, treated with suction; one patient showed hematoma, treated with hot packs for 3 weeks. All patients and their parents were satisfied of the aesthetic results obtained. All patients resumed sport activities 4 weeks after surgery. It was not possible to observe intraoperative complications.

Conclusion The technique used meets safety and efficacy standards for the treatment of this type of pediatric ginecomastia. It also offers the best possible aesthetic results with minimum complications which can be treated without the need of further surgery.

463 ISOLATED TORSION OF INFUNDIBULUM OF THE RIGHT FALLOPIAN TUBE IN A 12-YEAR-OLD GIRL

doi:10.1136/archdischild-2012-302724.0463

¹A Mantovani, ¹G Scirè, ¹FS Camoglio, ²N Zampieri. *¹Department of Surgery, Unit of Pediatric Surgery, University of Verona; ²Department of Anesthetic and Surgical Sciences, Pediatric Surgical Unit, University of Verona, Policlinico G.B. Rossi, Verona, Italy*

Introduction Isolated torsion of fallopian tube is a rare cause of acute abdominal pain. It can happen in different portions of the oviduct: in our patient a torsion at the level of the infundibulum occurred.

Case report A 12-year-old post-menarchal girl presented at our Pediatric Surgery Unit with a two days history of lower abdominal