Conclusions: There was no difference in early major morbidity and long term growth and neurodevelopmental outcome between SGA and AGA VLBW infants.

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STATISTICAL EVALUATION OF STREPTOCOCCUS RESISTANCE TO ANTIBIOTICS IN CHILDREN

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Background and aims: The „European Surveillance” reported resistance of group A streptococci to macrolides as follows: 11% of isolates in Portugal and 32% in Italy. First clindamycin-resistant isolate was reported in 1999. The authors evaluated antibiotic resistance of pyogenic streptococci (serogroups A, C, G) for hospitalized children.

Methods: There were realised 714 throat cultures during 30 days period: 56 isolates (7,84%) were positive (large-colony streptococci). Inclusion criteria (antibiogram performing): beta-hemolytic streptococci group A (GAS), C (GCS) and G (GGS). Exclusion criteria: small-colony streptococci. 34 isolates were selected for diffusimetric method (Mueller Hinton medium 5% sheep blood; *S. pneumoniae* ATCC 49619 strain as quality control) using penicillin, erythromycin and clindamycin disks. The cases were reevaluated after 10 days penicillin therapy.

Results: 7 strains (20,58%) were erythromycin resistant (5 strains GAS, 1 GCS, 1 GGS), 2 strains (5,88%) clindamycin resistant beta-lactamases produced by (1 strain GAS, 1 GGS). One case wasn't cured after penicillin therapy (antibiogram revealed resistance just for erythromycin), justifying Clindamycin treatment with good evolution. The other cases were successfully treated with penicillin.

Conclusions:

1. The study confirmed macrolides resistance for 1/5 strains of streptococci pyogenes;
2. It isn't recommended routine antibiogram;
3. Clindamycin resistance was identified for 6% strains;

4. Penicillin is first choice treatment for streptococcal pharyngitis;

5. One case was penicillin resistant, probably due to bacterial adaptive mechanisms: the streptococcus „internalisation” or saprophytic bacteria from mouth or streptococcus persistence in lingual tonsils;

6. The persistence of Streptococcus in pharynx after penicillin treatment is different from concept of GAS resistance to penicillin.

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EPIDEMIOLOGICAL ASPECTS OF SALMONELLA AND SHIGELLA INFECTIONS IN CHILDREN. STATISTICS OF PEDIATRIC CLINIC

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Background and aims: Prevalence of Salmonella and Shigella infections varies due to inconsistent diagnosis techniques. Authors evaluate Salmonella / Shigella infections from epidemiological and evolution points of view for hospitalized children.

Methods: There were performed 585 stool cultures during 3 months period using mediums (agar-desoxycholate-citrate-lactose medium, selenite broth), biochemical tests (mobility-indol-urease, triple-sugar-iron), latex agglutination, serological somatic (O) *Salmonella* tests. Mueller-Hinton medium was chosen for diffusimetric antibiogram using disks for ampicillin (AMP), ceftazidime (CAZ), trimetoprim-sulfamethoxazole (SXT), nalidixic acid (NA) and colimycin (CT). Inclusion criteria for antibiogram: newly diagnosed Salmonella / Shigella cases. Exclusion criteria: positive stool culture for previously treated children.

Results: From 585 samples, 39 (6,67%) were positive: 34 Salmonella isolates (17 group B, 15 group D, 2 group C) and 5 Shigella isolates (4 samples *S. sonnei*, 1 sample *S. boydii*). From Salmonella samples, 13 represented post-therapeutic relapses (5 group B, 7 group D, 1 sample group C). There were performed 21 antibiograms: group B Salmonella - from 9 samples, 6 strains AMP resistant, 2 SXT resistant; group D Salmonella - from 7 samples, 2 strains NA resistant; group C Salmonella - 1 susceptible strain; *Shigella sonnei* - 3 AMP and SXT resistant strains; *Shigella boydii* - 1

susceptible strain. All positive cases were treated according to antibiogram.

Conclusions:

1. Salmonella group B was most frequent detected;
2. Salmonella group D had higher relapse rate (7 relapses from 15 samples);
3. Higher resistance rate was reported for AMP and SXT;
4. As compare to Shigella, Salmonella cases had frequent relapses (13 from 34 samples).

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OUTCOMES OF SURGICALLY TREATED BABIES WITH GASTROSCHISIS- A 10 YEAR EXPERIENCE

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Background: Gastroschisis is now a common anomaly and survival rates are high, but there is a spectrum of outcomes.

Aims: To define the outcomes to discharge of babies treated for gastroschisis over a ten-year period.

Methods: All babies born with gastroschisis and treated at the regional surgical unit between 01/01/1998 - 31/12/2007 were identified and data obtained from case notes.

Results: 128 babies had gastroschisis, 1/4 with inadequate data died. Complete data were available in 124(97%). Median (range) gestation was 37 weeks (31-40), birth weight was 2300g(1400-4000) and maternal age 20 years (16-35). Primary closure was performed in 70(57%) babies, 31(25%) had silo reduction with secondary closure and 23(18%) babies had a Bianchi procedure. Bowel atresia was seen in 6(5%) and one baby had a perforation. The median age to full feeds was 25 days (12-350) and 2 babies went home on PN. The babies required a median of 24 days (10-350) of PN. There were 37

episodes of line infection in 27 babies, 2 developed intestinal failure and liver disease, one requiring liver transplant. 6 cases developed obstruction/stricture post-surgery (3 following NEC), 15(12%) babies were diagnosed with NEC. The median age at discharge was 32 days (16-364). There were no significant differences in outcomes between those with and without atresias.

Conclusions: 1/128 babies died. The median stay was 32 days but 8(6%) babies stayed over 6 months, one had liver transplant and 2 had home PN. This information is important when counselling parents of babies with gastroschisis.

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PREDICTABILITY OF COMPLICATED PERIPHERAL VENOUS ACCESS IN CHILDREN

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Background and aims: Potential risk factors for difficult venous access (BMI and a young age) are well known from experience, but literature evaluating these risk factors is sparse.

Methods: In a prospective cohort study, venous punctures were measured in pediatric patients at four departments at a university children's hospital: at the operating room (OR; n = 1080), the daycare outpatient clinic (n = 178), the outpatient phlebotomy station of the laboratory (n = 267) and children who were referred to the pediatric anesthesiologist at the recovery room, because their treating physician was unsuccessful in gaining intravenous access (n = 81). Time to successful venous access, single puncture rate and potential risk factors (age, gender, skin color, BMI or weight-to-age z-score, anesthetized or not, grade of performer and type of surgery if applicable) were measured. A logistic regression analysis for single puncture rate was performed to determine predictive factors for difficult peripheral venous access.

Results: The analysis showed that age, profession of the performer and type of surgery at OR (P< .001), age and skin color at the phlebotomy station (P< .001) and age at the recovery room (P=.002) were predictive for single puncture rate (table 1).