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NOTING THE NEED FOR NEONATAL ONLINE TRAINING IN EUROPE - LEONARDO DA VINCI THE THIRD

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A European syllabus for postgraduate training in neonatology was published in 1998 but within Europe there remains a wide variation in the quality and standards of training programmes. In two previous projects we have demonstrated that online neonatal training modules can provide education and training of a uniform standard, which is accessible to all trainees across Europe, irrespective of geographical or personal circumstances.

A third online training programme (N.O.T.E.), funded by the European Commission Leonardo da Vinci Programme, has been developed to offer four, syllabus-based, training modules. Summative assessment will be integrated, with the aim of offering successful participants an accredited, transferable qualification. This paper describes the outcome of the recruitment process.

Methods: Details of the programme were circulated by the 7 European partners to colleagues and trainees in their own and neighbouring countries.

Results: Application forms, including a standardised questionnaire, were submitted by 197 doctors from 20 countries. 66% were female; the mean age of both sexes was 35 years, ranging from 25 to 58 years with up to 25 years neonatal experience reported.

Reasons for applying were; 86% wished to increase knowledge, 54% expected to gain from multicultural

collaboration, 30% wanted to experience a new approach to learning. 62% had no prior online learning experience. The benefits of flexible studying and improved access to training resources were highlighted.

We conclude that there is demand for both online postgraduate education and continuing professional development in neonatal medicine to meet the needs of a diverse group of European doctors.

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VLBW INFANTS BORN SMALL FOR DATES: INCIDENCE, RISK FACTORS AND OUTCOME

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Background: The influence of being small for gestational age (SGA) on outcome of premature infants is controversial.

Aims: To compare early, two-year and five-year growth and neurodevelopmental outcomes of very low birthweight (VLBW) SGA infants with those appropriate for gestational age (AGA).

Methods: A retrospective, case-control study matched for gestational age was performed. Early outcome data were retrieved from medical records. Long term follow-up consisted of clinical examination and formal psychological assessments using the Bayley Scales of Infant Development (BSID) or Wechsler Preschool and Primary Scale of Intelligence (WPPSI).

Results: For the period 2003-2006, 33 SGA infants were matched with 66 AGA infants. SGA infants were associated with maternal hypertensive disorder, perinatal foetal distress, lower 1-minute apgar scores and higher CRIB and CRIB II scores. SGA infants had higher rates of pulmonary haemorrhage, hypoglycaemia and thrombocytopenia. There was no difference in mean BSID scores at 2 years, or mean full scale IQ scores at 5 years, although SGA infants tended to have higher verbal IQ scores and lower performance IQ scores. There was no difference in the incidence of neurodevelopmental impairment in both groups. Weight and head circumference at 2 years were significantly smaller for the SGA infants, however, at 5 years there were no growth differences observed between the 2 groups.

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-sulfamethoxazol (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