

VRE was isolated in 12 (1.6%) of the neonates. 6 of the neonates (50%) were born in public hospitals and 50% in private hospitals. To prevent the outbreaks in NICU we isolated the babies. Non of the babies were treated with vancomycin. The blood cultures were negative in all of them inspite of positive rectal colonisation. The diagnosis of these babies were as follows: 7/12 neonatal jaundice, 2/12 neonatal dehydration, 1/12 urinary tract infection, 1/12 bronchopneumonia, 1/12 preseptal cellulitis. Median hospital stay was 10 days (3–29 days). 2/3 of newborn were born with C/S delivery, there was no hospitalisation history.

Conclusion We wanted to emphasize the uncontrolled use of antibiotics can be a problem in future therefore surveillance studies should be performed.

1344 SERUM SILICON DURING THE FIRST YEAR OF LIFE

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Background and Aims Serum silicon (SSi) declines with age. Silicon is known to have positive effects on bone metabolism, but SSi in preterm infants and its relationship with other oligoelements have received little attention.

To study changes in SSi levels during the first year of life in preterm infants and to determine (a) whether there are differences compared with term newborns and one-year-old healthy infants, (b) their relationship with serum zinc and copper levels.

Methods We studied:

- 42 preterm infants (GA: 32±1.8 wk.; birthweight: 1651±281 g) assessed at 36 and 40 weeks post-conceptual age (PCA) and at 12 months corrected age (CA),
- 30 healthy full-term newborns aged 2–3 days and
- 30 healthy full-term infants aged 12 months.

At each evaluation, we recorded anthropometric measurements, serum Si, Zn, Cu (atomic absorption spectrometry) and bone alkaline phosphatase (immunoradiometric assay).

Results Preterm infants showed significantly higher SSi levels than non-preterm infants in all measurements. Although SSi decreased significantly between 40 weeks PCA and 12 months CA, it remained higher than in non-preterm infants. At 40 weeks PCA, zinc levels were lower while copper and bone alkaline phosphatase were higher in preterm infants. At 12 months the differences were not significant. There were no significant correlations between serum silicon, zinc and copper concentrations in any of the groups.

Conclusions SSi concentration in preterm newborns was significantly higher than in full-term newborns. Although it decreased during the first year of life, SSi remained higher than in full-term infants aged 12 months.

1345 THE VALUE OF TUBULARY PHOSPHATE REABSORPTIONRATIO IN DIAGNOSIS OF OSTEOPENIA OF PREMATURITY

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Objective The aim of this study was to evaluate the value of tubulary phosphorus reabsorption (TPR) ratio in diagnosis of osteopenia of prematurity.

Methods This prospective study was performed between June 2009 and March 2011 and premature infants < 32 weeks of

gestation and/or < 1500 gram were included. Maternal and neonatal demographic data were all recorded. The plasma Ca, P, ALP and 25-OH vitamin D levels of mothers and infants were evaluated. The neonatal morbidities, duration of hospitalization, on and total parenteral nutrition were also recorded. Infants were evaluated at postnatal 40th week. Bone mineralization was assessed by plasma Ca, P, ALP, urea, creatinine and GGT levels in combination with femur X-ray. Also, urine was collected to determine urinary Ca and P levels and tubulary phosphate reabsorption was calculated.

Results No significant differences were detected between infants with and without osteopenia of prematurity in terms of maternal biochemical values. On the postnatal 40th week, infants with TPR>95% had significantly higher ALP and lower P levels compared with those who had lower TPR. The sensitivity, specificity, positive predictive value and negative predictive value of TPR ratio in diagnosis of prematurity of osteopenia were found to be 27.2%, 82.7%, 17.1% and 89.6%, respectively.

Conclusion In conclusion, TPR ratio can be used as an ancillary diagnostic marker in addition to primary diagnostic tests in diagnosis of prematurity of osteopenia.

1346 HYPOTHYROIDISM VS HYPOTHYROIDISM IN VERY LOW BIRTH WEIGHT INFANTS

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Transient hypothyroxinemia without elevated thyroid-stimulating hormone (TSH) levels is common in prematurity, especially in very-low-birth weight (VLBW) infants. The transient hypothyroxinemia of prematurity (THOP) has been seen as a “benign” condition. Infants were classified as THOP by low thyroxine (T4) value without elevated TSH value (<20 µIU/mL). Primary hypothyroidism (PH) defined by low thyroxine (T4) and elevated thyroid-stimulating hormone (TSH) levels. Both of them can be seen at premature infants.

Retrospectively we compared the premature infants born at ≤32 weeks who required thyroxine supplementation for THOP and hypothyroidism. 24 neonates required thyroxine supplementation for THOP and 18 neonates for PH were included the study between January 2008 and December 2010.

There were no statistically differences in respect to demographic and prenatal characteristics between two groups. There was mild positive correlation between free T3, free T4 levels and gestational age. Median starting time of thyroxine supplementation was 13 days in PH and 21 days in THOP group (p=0.014). There were no statistically differences between groups in respect to birth-weight, hospitalization time, sepsis, NEC, PDA, and RDS rates. Although the THOP group started the thyroxine supplementation late, median weight of the neonates at discharge were significantly higher in THOP group (1774 vs 2070 p=0,018). Weight gaining per day after the thyroxine supplementation was significantly higher than the days before supplementation started (p=0.001).

Infants who get enough calories but not satisfactory gaining weight should be screened for THOP and PH.

1347 BODY COMPOSITION AT 32–36 WEEKS CORRECTED AGE IN INFANTS BORN BEFORE 32 WEEKS GESTATION

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