(serum bilirubin ≥ 15 mg/dl) and 278 control (serum bilirubin < 15 mg/dl) newborns in the first 2 weeks of age from central India. Both term and preterm neonates were studied. Genomic DNA was subjected to PCR-RFLP, SSCP and DNA sequencing to find out *UGT1A1* gene variants.

Results: *UGT1A1* -3297 G > T variant was found in 44 (17.8%) cases and 22 (7.9%) controls (OR 2.5; 95% CI 1.46-4.34). CAT box insertion (CAT)₁→

(CAT)₂ was seen in 5 (2.1%) cases and 1 (0.4%) control (OR 5.7; 95% CI 0.6-49.3). TATA box variant (TA)₆→(TA)₇ was detected in 151 (61.2%) cases and 141 (50.7%) controls (OR 1.42; 95% CI 1.06-2.13). 211G > A variant was seen in 13 (5.3%) cases and 5 (1.8%) controls (OR 3.03; 95% CI 1.06-8.63). 1456 T > G variant was found in one case and none in controls while 686C > A and 1091 C > T variants were not detected in any case or control newborns. Compound variations of *UGT1A1* gene such as -3297 G > T and 211G > A, -3297G > T and (TA)₆→(TA)₇, and 211G > A and (TA)₆→(TA)₇ significantly increased the risk of hyperbilirubinemia. Logistic regression analysis showed prematurity, ABO incompatibility, sepsis, weight loss $\geq 10\%$, and -3297G > T, CAT box insertion and TATA box variants as significant risk factors for NNH.

Conclusion: Variants of *UGT1A1* gene, singly or in combination, contribute significantly to neonatal hyperbilirubinemia in Indian population.

817

ORAL-FACIAL CLEFTS/THE INCIDENCE, CAUSES AND SYMPTOMS AT THE CHILDREN HOSPITALIZED IN CHILDREN'S WARD IN STIP

N. Velickova, M. Gacova

Faculty of Medical Science, University Goce Delcev, Stip, FYR Macedonia

Background: Oral-facial clefts are birth defects in which the tissues of the mouth or lip don't form properly during fetal development. The causes of these birth defects are not well understood, but believe it may be a combination of genetic and environmental factors (drugs, illnesses, and the use of alcohol or tobacco while a woman is pregnant) - multifactorial inheritance.

Aim: To evaluate the incidence, causes and symptoms of oral facial clefts at the children's ward in Stip.

Methods: After birth, cleft lip and palate are diagnosed by physical exam. Special exposure of their mothers during pregnancy indicates that environmental factors increase the risk of cleft lip and palate.

Results: During the past 10 year children with oral facial clefts are born in series in the same or closer month in the year. We concluded that every year the number of children with oral-facial clefts growing and they were not associated with any syndrome. Their parents don't have a oral-facial clefts. Children with oral-facial clefts have special problems and complication like feeding difficulties, ear infections and hearing loss.

Conclusion: The obtained results suggest that environmental factors, such as drugs (several different anti-seizure drugs) and maternal smoking, are risk factors for appearance of oral-facial clefts. Cleft lips and palates not associated with a syndrome are caused by a combination of genetic and environmental factors. Other environmental factors that are suspected of playing a role include infections, maternal alcohol use and deficiency of the B vitamin folic acid.

818

CYTOGENETIC PARAMETERS FOR CHILDREN LIVING IN REGIONS WITH RADIATION AND CHEMICAL TOXIC FACTORS

M. Appasova, S. Choy

Department of Paediatrics, Kazakh National Medical University, Almaty, Kazakhstan

By the purpose of the present research was the realization of a comparative estimation of cytogenetic parameters for children of Semipalatinsk and Aral locales. The cytogenetic method inspected 100 children living in locales, accumbent to Semipalatinsk test nuclear range (STNR), 100 children of Aral sea region and 50 children of group of matching. For the greater objectivity and the reliabilities as monitoring cytogenetic parameters were usage the data a CART. Cultivating of lymphocytes conducted pursuant to a standard technique in lab of an experimental mutagenesis of Institute of general genetics and cytology of a National Academy of sciences of Republic of Kazakhstan. The general frequency of aberrations in locales STNR (1,86) and Aral sea region (1,90) was approximately equal, but exceeded a similar parameter of children of group of matching (0,62) ($p < 0,001$ and $p <$