Wilson’s disease. Detection of WD in children and young adults remains very difficult. The most important investigation is liver biopsy with the assessment of liver copper. Genetic analysis may help in doubtful cases.

DNA DAMAGE AND APOPTOSIS EVALUATION IN LEUKOCYTES OF ICTERIC NEWBORNS AFTER PHOTOTHERAPY TREATMENT BY USING OF THE NEUTRAL COMET ASSAY

Methods The study included 15 healthy full-term newborns as control. The phototherapy group consisted of 30 non-physiologic jaundice infants that after 16 hours phototherapy, 1 ml peripheral venous blood were obtained of them.

Results DNA damage immediately after phototherapy termination (IFT) was higher in jaundice infants than control one (p<0.01). After 24 hours cells repaired their damages, as there wasn’t any difference between these groups about this value. DNA damage in the phototherapy group was higher at IFT than 24 hours after that, but in the control one there weren’t any differences between them(respectively p<0.001, p<0.05). Apoptosis value at 24 hours after phototherapy termination was higher than the IFT in the phototherapy group and was statistically significant (P<0.001).

Conclusions Since repair proofreading and fidelity properties isn’t absolutely, then always this is probable that errors maybe occur during extensive DNA damages repair and finally these errors can cause mutation in DNA. If this event be in important and sensitive region of genome, harmful effects would menace phototherapy-treated infants’ later-life. So this is necessary to investigation of long-term genotoxic effects of phototherapy in phototherapy-treated neonates.

INTERLEUKIN-13 RECEPTOR α 1 GENE POLYMORPHISM AND IL-13 BLOOD LEVEL IN ATOPIC AND NON ATOPIC ASTHMATIC AND ALLERGIC RHINITIS CHILDREN

Objectives To assess the value of serum interleukin (IL) 13 levels as an immunological marker in atopic upper respiratory diseases, to clarify its differences in atopic and non atopic bronchial asthma and to determine the role of an IL-13 R α 1 gene single nucleotide polymorphism (SNP) (A1398G) in the pathogenesis of these diseases.

Methods Seventy-five patients were compared with 25 age-matched healthy volunteers. Serum total immunoglobulin (Ig) E and IL-13 levels were measured by enzyme-linked immunosorbent assay and the IL-13 R α 1 gene (A1398 G) was screened by specific polymerase chain reaction.

Results There was a non significant association between G allele frequencies of the IL-13 R α 1 (A1398) gene polymorphism as compared to in controls. There were a significant increase in the serum level of total IgE & IL-13 towards heterozygous AG and homozygous GG than homozygous AA in atopic asthma, non atopic asthma, and allergic rhinitis patients. There was a significant increase in the serum level of total IgE & IL-13 towards homozygous GG than heterozygous AG in atopic asthma non atopic asthma, and allergic rhinitis patients for IgE and in all groups for IL-13.

Conclusion interleukin-13 receptor α 1 subunit gene A1398G polymorphism does not contribute to asthma or allergic rhinitis susceptibility, although the interleukin-13 receptor α 1 subunit gene locus might be involved in the control of immunoglobulin E production, IL13 can be used as an immunological marker in atopic upper respiratory diseases and to differentiate between atopic and non atopic bronchial asthma.