with KD in childhood were reevaluated in young adulthood including the analysis of TLR2 and TLR4 regarding expression pattern, stimulation effects and polymorphisms (SNP) compared to an age- and sex related control group.

Heterozygote Genotype for TLR2 SNP was found in two KD patients, one also positive for TLR4 SNP, both had no acute or late cardiac symptoms. The expression pattern on the surface of monocytes showed no difference between the KD and control group, nor in the KD patients with or without cardiac pathology. Stimulation via TLR2 and TLR4 also showed no significant influence on p38 and ERK phosphorylation and cytokine induction.

We can conclude that there is no disturbance in the innate immune system of previous patients with KD, but a modest positive effect of TLR2 and TLR4 SNPs on coronary involvement can be discussed.

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ACUTE BRONCHIOLITIS IN A PAEDIATRIC DEPARTMENT: MULTIPLE-CASE STUDY

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Background and objective: Acute viral bronchiolitis is an important cause of severe low respiratory tract infection in infants worldwide, with significant burden on the healthcare systems. The aim of the study was the analysis of factors with impact on acute bronchiolitis cases characteristics admitted in a Paediatric Department.

Methods: Descriptive multiple-case study. All cases of acute bronchiolitis presenting to an Emergency Department of a tertiary care unit for a 12 months were included. The database included as variables: age, sex, risk factors, seasonal variation, clinical aspects, duration of hospitalization, and treatment. Multivariable statistics by regression analysis were used.

Results: During the studied interval, 237 children with acute bronchiolitis were examined in the Emergency Department and 183 (77,21%) were admitted. The mean duration of the hospitalization

was 5,3 days. 75% of the hospitalized children were younger than 12 months of age and among those, infants between 3 and 6 month (33,5%) were more often affected. 64,55% of the children were males. The risk factors identified were: prematurity, pre-existing heart or lung diseases, parental smoking, and low socioeconomic conditions. All children had moderate to severe respiratory symptoms (wheezing, expiratory dyspnoea, and cough), poor feeding and 15% of them had evidence of respiratory distress at admission. There was a large spectrum of medication administered (i.e. bronchodilators, inhaled/systemic corticotherapy, antileukotriens) at the studied group.

Conclusions: Acute viral bronchiolitis is an important cause of hospitalization in children. Although hospitalized children had favourable outcome, large variations in treatment mandate the reinforcement of current guidelines and protocols.

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ALTERNATING IBUPROFEN AND ACETAMINOPHEN IN THE TREATMENT OF FEBRILE HOSPITALIZED CHILDREN AGED 9-24 MONTHS. URMIA IRAN

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Introduction: Recently, studies reported the emergence and increasing popularity of the alternative use of acetaminophen and ibuprofen. The aim of the present study was to compare the clinical effectiveness of acetaminophen alone with an alternative regimen of acetaminophen and ibuprofen in hospitalized infant with fever of non bacterial origin and 9-24 month old age.

Material & methods: In this clinical trial study, Patients were randomly separated into two groups according to their admission. Eligible cases were febrile hospitalized patients aged between 9month and 24 months; whose rectal temperature was $\geq 38.5^{\circ}\text{C}$. Infants of case group received 15 ml/ kg of acetaminophen alternating with 10 ml/ kg of ibuprofen every four hour. Infants of control group received 15 ml/ kg of acetaminophen every four hour. Temperature data of patients of two group were collected 2, 4, 5 7, 8 hour after drug administration and were compared. The study was completed when each group received 35 cases.

Findings: Of the 76 cases, 70 infants fully cooperated with researchers. The number of male and female patients in case and control groups was, 19 versus 16 and 18 versus 17 respectively. The results revealed significant difference between two groups in lowering fever at 4, 5, 7 and 8 hours after treatment was initiated, but there is no significant difference at 2 hours after drug was administrated..

Conclusion: An alternating treatment of acetaminophen (15mg/kg) and ibuprofen (10mg/kg) 4 hours later is more effective than acetaminophen in lowering fever in infants 9 to 24 months old.

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IN INFANTS WITH AN INITIAL DIAGNOSIS OF TRANSIENT HYPOGAMMAGLOBULINEMIA OF INFANCY (THI), IS THE USE OF IV IMMUNOGLOBULIN WARRANTED?

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Introduction: THI is a defect in a child's endogenous immunoglobulin production. It presents early following the physiological catabolism of the remnants of maternal immunoglobulin, transferred trans-placentally during the course of pregnancy. Physiological hypogammaglobulinemia normalises by 2-4 months. However during prolonged THI; the infant is rendered susceptible to a range of bacterial infections. In severe cases intravenous immunoglobulin-G (IV-IgG) replacement therapy has been proposed as treatment.

Objectives: To analyse current experimental literature in order to assess the suitability of IV-IgG therapy for patients diagnosed with suspected THI. Assessment of therapeutic use of IV-IgG from retrospective case controls. Further qualification of when to use IV-IgG by assessment of additional factors: symptomatology, time to normalisation of immunoglobulins and comparison with other immunodeficiency syndromes.

Methods: PubMed - searched with MeSH term "hypogammaglobulinemia"; "transient hypogammaglobulinemia infancy", "hypogammaglobulinemia IVIg", "paediatric hypogammaglobulinaemia".

Results: Antibiotics are first-line treatment for recurrent infections. IV-IgG replacement therapy is not routinely warranted for symptomatic THI. Cases where infections are severe/resistant to conventional management, IV-IgG therapy can be considered.

Other primary immunodeficiencies requiring IVIG therapy present similarly to THI as recurrent infections. In contrast THI is self-resolving with a benign clinical progression if managed appropriately;

Conclusion: Most children with THI do not require IV-IgG, with the exception of severe life-threatening infections or ongoing bacterial respiratory infection despite prophylactic antibiotic therapy. In these circumstances trials of IV-IgG for 6-12 months are indicated.

There are no published studies that comprehensively assess the cost-effectiveness of IV-IgG replacement in any healthcare setting for THI.

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DISCREPANCY BETWEEN INTERFERON GAMMA RELEASE ASSAY AND TUBERCULIN SKIN TEST FOR DIAGNOSIS OF LATENT TUBERCULOSIS INFECTION IN BCG VACCINATED CHILDREN

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Background and aims: Tuberculosis is one of the major health problems in the world. Interferon gamma release assay (IGRA) is a novel tool for Mycobacterium tuberculosis infection diagnosis. The aim of our study was comparing the TST and human PPD based IGRA for diagnosing Latent tuberculosis infection (LTBI) in BCG vaccinated children.

Methods: Between august 2006 and may 2007 a total of 242 children aged 1month to 168 months (mean 21 months)whom admitted to different wards of Mofid children hospital and met the inclusion criteria were enrolled in a cross sectional study with sequential manner. Each patient was tested with both TST and human PPD based IGRA.