Acquired Bullous Pemphigoid: A Case Report

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Background: Bullous pemphigoid is the most common dermatological autoimmune blistering disease in adults. Only a few pediatric observations are reported in the literature.

Objective: Report a new pediatric observation of this rare disease.

Observation: We report a 4-month-old girl admitted with fever and rash lasting for two weeks. She was born to consanguineous parents and her mother have had a normal pregnancy. The eruption started six weeks after the third–month vaccination. On examination, we noted erythematous plaques of different ages, crusted in some places with many bullae extended over the entire body. The bullae were located predominantly on palms and soles sparing the scalp. Skin biopsy showed a morphology and immune phenotype compatible with bullous pemphigoid. Treatment with general corticosteroids was initiated and the response was rapidly favorable.

Conclusion: In children, acquired bullous pemphigoid is exceptional. Unlike adults in whom local corticosteroid dose is the standard treatment, the prognosis in childhood is better.
Effect of Malnutrition and Thymomegalia on the Immune Status and Development of the Syndrome of Bronchial Obstruction in Children of Early Age

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Background: The state of immune system plays an important role in the pathogenesis of the syndrome of bronchial obstruction (BOS) in children. At the same time determination of the effect of such factors as malnutrition and presence of thymomegalia on the immune system and prognosis of BOS in young children is of special interest and actuality

Purpose: Determination of the effect of thymomegalia and malnutrition on the immune status of children with BOS.

Material and Methods: There were studied 168 children at the age under 3 with BOS in relation to the state of nutrition and presence of thymomegalia. The basic parameters of immune status were studied in all children.

Results: The results of investigations showed decrease in expression of CD3+ and CD4+-markers on the lymphocytes in children with thymomegalia and malnutrition (p<0.001). Increase in level of CD8+ of effector T-cells to 27.5±0.95% (p<0.001), comparison with control values (22.9±1.0%) were characteristic. These changes were at the basis of deficit of T-lymphocytes of helper/inductors (CD4+ - 26.04±1.17%), decrease in immuneregulatory index (CD4+/CD8+, p<0.001). There was revealed reliable increase in CD16+ cells.

Study of the cellular parameters of immune system in children with BOS without thymomegalia and malnutrition revealed increase in total number of lymphocytes (p<0.05), CD8+ (p<0.05), expressions of lymphocyte CD16+ antigens (p<0.001), reduction of IgA and IgM (p<0.05). CD3+ cells in children with thymomegalia and malnutrition accounted for 44.6±1.185%, and in children without thymomegalia – 54.4±1.6%. In children with thymomegalia the number of CD4+ cells was reduced in comparison with values CD4+ in children without thymomegalia(p<0.001). Thus, in children with thymomegalia and malnutrition in comparison with children without them there was revealed presence of T- and B-cellular immune deficit. As to humoral immunity there was found reduction of concentration of immunoglobulins G and A in the blood serum. These changes correlated with severity degree and recurrences of BOS in young children.
Background: Overcrowding, poor housing conditions and hygiene, undernutrition are known risk factors for rheumatic heart disease (RHD) in developing countries.

Objective: The objective of this study was to investigate the role of some medical and socioeconomic risk factors in the pathogenesis of RHD in children of west Ukraine.

Methods: This was a case control study in which RHD cases and controls (children who had rheumatic fever, but not developed RHD) aged 8-17 years were investigated for some socioeconomic and medical risk factors. 132 participants (78 cases and 54 controls) took part in the study.

Results: Average age was 15.21+/-1.8 years for cases and 14.15+/-2.1 years for controls. Among cases village residents were dominated city ones (64.1% versus 20.4%, p=0.0018). It could mean less access to healthcare. More cases parents were unemployed than controls (34.6% versus 13.0%, p=0.0464). There were no significant difference between controls and cases in the frequency of incomplete families and overcrowding (p>0.05). Among medical risk factors more common in cases than in controls were chronic infections (29.5% versus 7.4%, p=0.0103) and pathology of the endocrine system, especially of the thyroid gland (29.5% versus 1.9%, p=0.001). Impact of recurrent rheumatic fever was also significant in cases (31.3% versus 1.9%, p=0.001). Lack of secondary prevention of streptococcal infections was more common in cases than in controls (24.4% versus 5.6%, p=0.0268). The main reason for lack of secondary prevention was the low adherence to prophylaxis. It occurred more often than allergic reactions to penicillin (20.5% versus 3.9%, p=0.0099).

Conclusion: This study has demonstrated significant role of thyroid gland disease among other well-known medical and socioeconomic risk factors of RHD. Further studies of the role of thyroid hormones and their impact on development of RHD are needed. This will outline a possible new approach of disease prevention.
Objective: to emphasize the difficult diagnosis of Kawasaki disease, calling attention to the importance of clinical suspicion and investigation.

Description: report of four cases who presented with severe clinical manifestations, but had complications and different temporal evolutions, with a high incidence of cardiac sequelae (coronary aneurysms) and with rapid progression of coronary lesions, regardless of the therapy employed.

Conclusions: the lack of specific laboratory tests and the existence of atypical and incomplete cases often involve in delayed diagnosis and delayed initiation of specific therapy, leading to a poor prognosis for the patient.
Henoch-Schönlein purpura (HSP) with unknown etiology, is a leukocytoclastic vasculitis with involvement of the skin, including the joints, gastrointestinal tract, kidneys, and even more rarely, involvement of the other systems. We present a case with involvement of the scrotum and penis.

Case:
4 year-old male patient who has had rash on his legs 10 days ago, also bruising and swelling of penis and scrotum the day before applying to our clinic. There was no evidence of abnormal findings in the systematic examination of the patient. Laboratory examinations, urinalysis, urea, creatinine, electrolytes, complete blood count, C3, and autoantibodies were normal. The Patient with wide spread edema and ecchymosis on penis and scrotum, had both testicles are in scrotum with homogeneous echo, both epididymis sizes increased and the penis was with edema in scrotal USG, scrotal Doppler ultrasounds were normal. Skin biopsy was consistent with leukocytoclastic vasculitis. The patient was treated with NSAIDs. The patient whose findings had decreased in three days was discharged.

The patient with scrotum and penis edema and ecchymosis which are the rare findings in HSP, recovered in a short period of time.
Role of IL-6,8,10, TGF-ß1 in the Prognosis of Chronic Lung Diseases

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Background: We are observed the tendency to injury the small airway and fibrosis. Bronchopulmonary dysplasia (BPD), obliterate bronchiolitis (OB), interstitial pneumonia (IP) are complicated the remodeling and lung fibrosis.

Aim: We indentified the role of IL-6, IL-8, IL-10, TGF-ß1 in the regulation of the ontogenesis and fibrosis of lung.

Methods: Observed the 145 patients, 1-36 month in 2007-2013. The 130 children with BPD, 13 patients with OB, two children with IP. Control group consisted of 30 children who were born prematurely with low birth weight, haven’t respiratory diseases. Cytokines we determined in sputum induced by inhalation 3% saline.

Results: Children with chronic lung diseases had a higher sputum concentration of IL-6 – 55,1 (51,4; 60,7) pg/ml, (p0,001), IL-8 - 90,1(88,3; 93,8) pg/ml, (p0,001), and had the hyperactivation of negative regulators of the immunity system, such as IL-10 - 81,5 (77,6; 85,4) pg/ml, (p0,001), TGF-ß1 - 678,57 (541,21; 994,51) pg/ml, (p0,001). In patients of the basis group we observed significant strong correlation between the low of alveologenesis and sputum levels of IL-10 (r=0,689, p0,05), and sputum levels of TGF-ß1 (r=0,567, p0,05). The new activation of vascularization and the increasing of sputum levels IL-10 (r=0,452, p0,05) and sputum levels TGF-ß1 (r=0,378, p0,05) were significant correlated. In the subjects the sp areading of lung fibrosis was correlated with the IL-8 (r=0,499, p 0,05), and the hyperactivation of TGF-ß1 (r =0,507, p 0,05).

Conclusions: Children with chronic lung diseases have activation of IL-6, IL-8 are increased the production of IL-10, TGF-ß1. It correlation with decrease of the alveologenesis, increase number of vessel, activation of lung fibrosis.
Background and objective: The nutritional status is one of the factors influencing the allergy in children. We assessed the nutrition patterns in the patients admitted to our pediatric department and we tried to correlate them to the atopic status.

Methods: The children aged 6 to 16 were enrolled in a prospective research during 2012. The nutritional history was compared to the presence of atopic disease (asthma, atopic rhinitis, atopic dermatitis or food allergy). The statistical analysis was done using the EpiInfo freeware program.

Results: 412 children (256 male) were included: 167 with atopic diseases (study group). 42 children in the study group were breastfeed over 6 months vs. 85 controls: \( p = 0.01, \text{RR} = 0.75 \) (0.56–0.99). Using a cow milk based diet versus follow on formula in children aged over 1 yr was associated with atopy: 140 vs. 181 cases, \( p = 0.008; \text{RR} = 1.47 \) (1.04 – 2.06). Fast-food based diets (over 4 times/week) did not influenced the atopic status (\( p = 0.09 \)). There was no difference regarding the gender or the type of atopic disease.

Conclusions: Breastfeeding has a protective effect in the development of atopy in our study group. The early introduction of cow milk is also associated to atopic diseases whilst fast food diets seemed to have no influence.