reader bias and more sensitivity. Despite this, it is more expensive and less commonly used.
Conclusion: With increasing risk of TB reactivation in patients on biologics, physicians should be highly vigilant about atypical presentations (lack of fever, night sweats) in this population and maintain a high level of suspicion despite a negative screening as it can cause delays in diagnosis and place contacts and healthcare providers at risk. QTB-G test is more sensitive and has been substituted for TST in many practices.

P179

EPIDEMIOLOGICAL CHARACTERISTICS OF SYSTEMIC LUPUS ERYTHEMATOSUS IN CRIMEA, A SUBTROPICAL MULTIETHNIC REGION

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Background: Systemic Lupus erythematosus (SLE) is an autoimmune rheumatic disease with complex pathogenesis and variable epidemiological characteristics in different geographical regions.
Method: 102 patients with SLE diagnosed by ACR Criteria treated at the Crimea State Clinic named after N.A. Semashko were assessed including epidemiological analysis.
Results: Stratification of patients by age showed the highest incidence rate from 20 to 49 years old, being greatest from 25 to 30 years old. Average time from appearance of first symptoms to diagnosis was 1.25±1.06 years, with maximum of 4 years. Prevalence among different ethnic groups included 86.3% (87) Slavic and 13.7% (15) Crimean Tatar. All cases of SLE in the Tatar population were female. The overall prevalence of SLE in Crimea in 2013 was 5.59 per 100,000. Among the Crimean Tatar population the prevalence of SLE was 5.52 per 100,000, while in the Slavic population was 5.61 per 100,000 (p=0.9). Newly diagnosed cases of SLE increased from 1994 to 2004 to a rate of 0.05%, with an average annual growth rate of 0.24%. From 2004 to 2014 SLE increased to a rate of 0.16% with an annual growth rate of 0.36%. There was no statistical differences in prevalence of SLE among rural or urban residents.
Conclusion: SLE prevalence in Crimea in 2014 was low in comparison to world data but there is an upward trend in the incidence. There was no statistical differences between the main populations, Slavs and Crimean Tatars.

P180

CHEST PAIN AND ELEVATED TROPONIN LEVELS IN A TEENAGE BOY WITH NEWLY DIAGNOSED SLE

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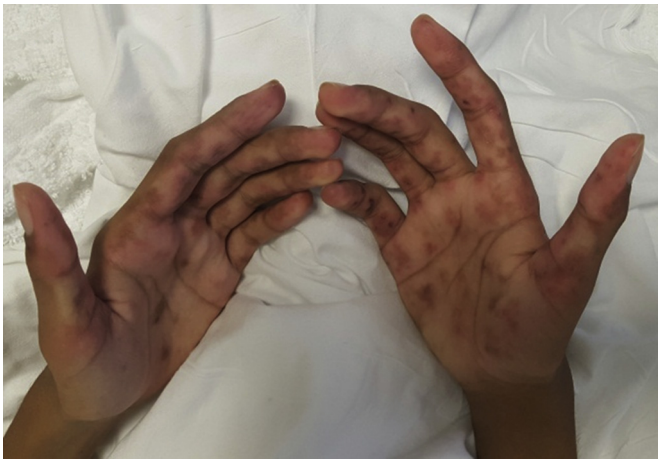
Introduction: Cardiac involvement in SLE may manifest as endocarditis, myocarditis, pericarditis or conduction abnormalities. Acute myocardial infarction has been reported with an incidence rate of 6.33 per 1,000 person-years in 15-24 year olds with SLE. Few case series show coronary arteritis in pediatric SLE.
Methods: 13 year old boy presented with fever, chest pain and palmar rash. For past 1 year, he reported skin rashes, Raynaud's phenomena, knee pain, weight loss, alopecia and xerostomia. He was diagnosed with SLE 1 month prior with ANA+, anti-dsDNA+, photosensitivity, arthritis and lymphopenia. PMH revealed hypothyroidism. Evaluation revealed a normal EKG and Cardiac ECHO. CBC revealed leucopenia (2140 K/uL)), mild neutropenia (1200/uL), elevated ESR (26 mm/h) and prolonged PTT (55.1 sec). Troponin I was elevated (0.24 ng/ml (normal = 0.1)), anti-RNP + (470Au/mL), and anti-cardiolipin IgM+ (43.2 MPL). Examination was notable for vasculitic rash (figure 1).
Results: He was started on ibuprofen and IV methylprednisolone at 1mg/kg/dose, increased to twice daily on day 3 due to persistent vasculitis and leucopenia. Chest pain resolved after admission. No angiography was performed as he remained asymptomatic with normal EKGs. Troponin levels normalized on day 3. Repeat ECHO and CBC on day of discharge were normal.
Conclusion: Pediatric SLE patients presenting with chest pain should be evaluated for possible ischemic events and coronary vasculitis. The role of anti-platelets therapy or hydroxychloroquine in preventing cardiac trombotic events in pediatric lupus patients is unclear.



Vasculitic rash

P181

ATOPIC DERMATITIS AND ERYTHRODERMIA ASSOCIATED WITH SYSTEMIC LUPUS ERYTHEMATOSUS: A CASE REPORT

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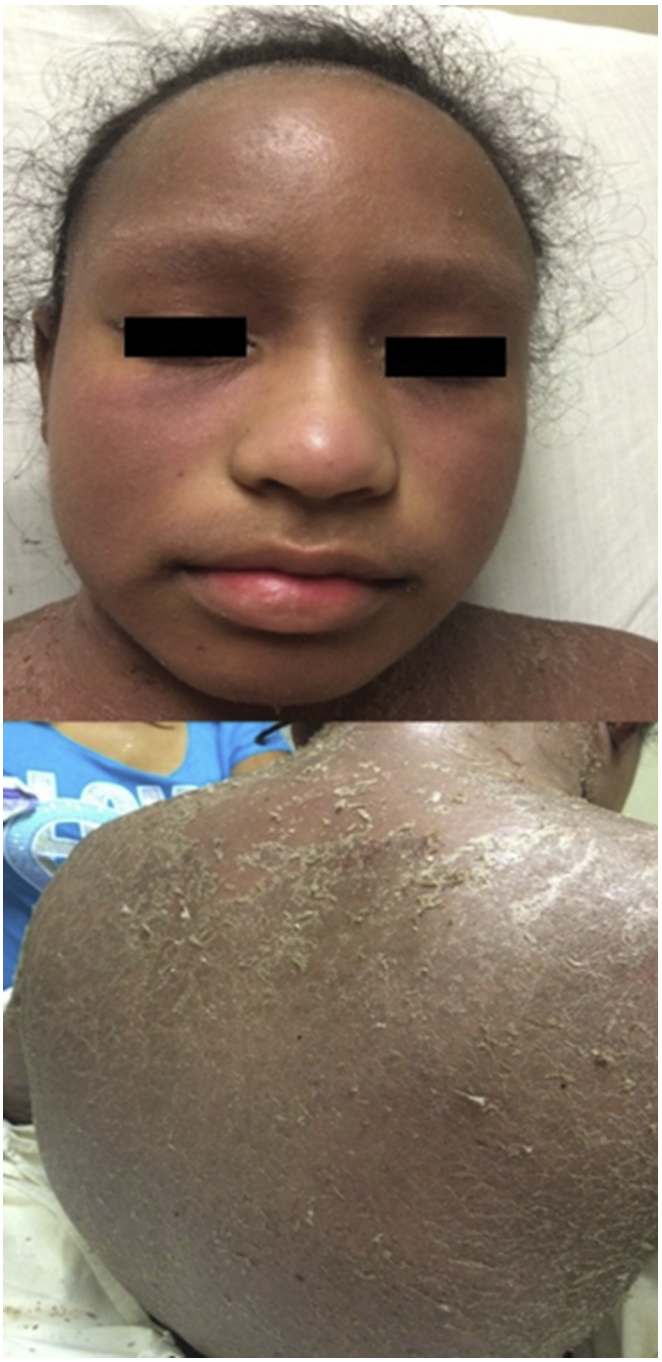
Introduction: Erythrodermia is an inflammatory dermatosis involving partial or total layers of the skin. The mortality is of 16%. Systemic symptoms include fever, tachycardia, swelling of limbs, adenomegaly, and hepatomegaly. Infectious causes are the most frequent, being present in up to 40%, followed by ictiosis and dermatitis in 15% of the cases.
Case Presentation: A 13 year old female with family history of juvenile idiopathic arthrtis started 14 months earlier with eczema on the antecubital fold and popliteal fossa, with facial photosensitivity for which she received treatment with topical steroides and moisturizers. She was diagnosed as having atopic dermatitis. Six months later, the eczema progressed in extention with lichenification, desquamation, madarosis, malar erythema and painful fissures with itchiness and lower limb edema as well as arthritis of knees and phalanges, fever and anterograde amnesia. In the physical examination the patient has oral ulcers, hepatomegaly, and positive ++ Godette sign.
Discussion: Arm biopsy reported negative for immune complexes and the results from the biopsy of the right gluteus reported atopic dermatitis. The serology exams reported normal C3, low C4, positive ANA (Hep2) 1:320 and negative anti DNA. A diagnosis of lupus was made with 5 criteria of the 2012 SLICC SLE criteria. Treatment with methylprednisolone and moisturizers was initiated. She was sent home with prednisone, folinic acid, hydroxychloroquine and methotrexate. Skin tests were positive for Dermatophagoides and Junglans.

Conclusion: The development of lupus starting with an early epidermic injury involving mutations in the filagrin gene, associated with atopic dermatitis, as in this case, has been reported.



P182

CYTOKINE PROFILES OF ELITE ATHLETES HAVING DIFFERENT ENERGY CONSUMPTION AND ANTHROPOMORPHIC PARAMETERS

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Background: Endurance exercise in elite sport can impact the immune system with prolonged immune disturbances in immune cells subpopulations and cytokines due to intense exercise leading to secondary immunodeficiency. This study assesses cytokine profiles in sera of elite sportsmen with varying energy consumption.

Methods: Cytokine profiles in sera from bobsleigh sportsmen (48) and markmen (55) were assessed by ELISA assay. Basal metabolism (BM) was assessed in male athletes. In marksmen, the level of BM was 1753 ± 186.8 kcal/day; in bobsledders BM was 2133 ± 198.1 kcal/day. Similar differences were obtained in the female athletes: 1426 ± 163.1 kcal/day and 1661 ± 206.7 kcal/day, respectively.

Results: Analysis of sera cytokines showed significant increases in IL-4 and IL- 18 in bobsledders versus marksmen. The IL-4 values were 1.5 ± 0.9 pg/ml vs. 0.45 ± 0.23 pg /ml ($P < 0.05$) and IL-18 were 467.5 ± 155.21 pg/ml vs. 304.5 ± 126.8 pg/ml ($p < 0.05$), respectively. Concentrations of IL-6 and IL-10 had a trend towards increase. The concentration of IFN-? was similar in both groups. Correlations between serum cytokines and anthropomorphic data (muscle mass index and body mass index as well as energy consumption) were found. In bobsledders, cytokine levels (IL-4, IL-6, IL-10 and IL-18) were greater than in marksmen.

Conclusion: The level of energy consumption has an effect on cytokine profiles of elite athletes. All the levels of cytokines from elite athletes were not greater than seen in the general population.

P183

THE OPTIMAL APPROACH TO ASSESSING T CELL FUNCTION IN HEMATOPOIETIC CELL TRANSPLANT (HCT) RECIPIENTS

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Introduction: Advances in HCT are resulting in long-term survivors who require vaccination. Guidelines indicate use of MMR and Varicella as the only live vaccines used following HCT. Assessment of T-cell function pre-vaccination in post-HCT patients is a reasonable strategy to determine immune competence for vaccination. Global assessment of T-cell function is achieved by measuring T-cell proliferative responses to mitogens (Mg), phytohemagglutinin (PHA) and Pokeweed mitogen (PWM).

Methods: We present a case of Varicella infection after vaccination in a matched unrelated allogeneic-HCT recipient despite assessment of T-cell proliferative function using Mg.

Results: A 12-year-old girl with relapsed AML underwent allogenic-HCT in 2014. Post-transplant course was complicated by infections and graft versus host disease but immunosuppression was weaned approximately 14 months post-HCT. She had complete donor chimerism. Mg revealed normal responses to PHA but borderline normal to PWM, a weak T-cell mitogen. Normal PHA response directed the decision to use varicella and MMR vaccination. Ten days post-vaccination, she developed Varicella infection. Two months post-infection, Mg response to PHA was stable. Additional T-cell function studies were performed using anti-CD3 stimulation with either anti-CD28 or IL-2. She had an abnormal proliferative response to aCD3/aCD28 with a minor reduction in aCD3/IL-2 response.

Conclusions: Assessment of proliferative responses with aCD3 stimulants represents a more physiological measure of T-cell function than the non-specific read-out offered by PHA. Therefore, in contexts of severe immunodeficiency, including post-HCT, it may be appropriate to include both PHA and aCD3 proliferative