Anti-nuclear antibodies (ANA) are a group of the antibodies that develop against intracellular components of the cells. It is usually useful for diagnosing some of the connective tissue diseases like systemic lupus erythematosus, mixed connective tissue disease.

But it is reported that its positivity rate is about in healthy individuals.

Therefore, it can be confusing to check ANA test, if there is not really high suspicion for connective tissue diseases or juvenile idiopathic arthritis.

We aimed to evaluate results of long-term follow-up of the patients with ANA positivity who had initially no identifiable rheumatic diseases.

Six hundred and ninety-four patients with ANA positivity who did not diagnosed as any of the rheumatic diseases at the first examination were found in database. Two hundred and eightytwo patients of them were called so far and questioned about their demographic features and symptoms that are related with rheumatic diseases.

Mean age of the patients at the time of study and at the time of testing were 13.4± 4.5 and 9.1±4.0 years. The female: male ratio was 1.05. Mean follow-up duration was 4.3±2.8 years. Most common reasons for the request for ANA test were arthralgia (n:99 (D.1)) and skin eruptions (n: 54 (24.1)). ANA testing was most commonly requested by a general pediatricians.

Most of the diseases(Hypermobility Syndrome, Urticaria, Hypothyroidism, Transient synovitis, Idiopathic Thrombocytopenic Purpura, Scoliosis) were diagnosed in patients with ANA positivity were not related with autoimmune mechanisms that associated with ANA positivity therefore, these diseases are thought to be coincidence. Only in 1 patients, systemic lupus erythematosus that has certain association with ANA positivity were diagnosed.

We are reporting that in only 0.3% of patients with ANA positivity who don’t have any diseases diagnosed initially, were diagnosed as rheumatologic diseases during to the follow-up period.

Since positivity of ANA is also common in the healthy population, requesting this test in only patients with high suspicion for connective tissue disease will reduce confusion in terms of diagnosis.

CASTLEMAN DISEASE PRESENTED WITH PROLONGED FEVER OF UNKNOWN ORIGIN

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Castleman disease presented with prolonged fever of unknown origin– a case report Janjic T(1), Pavlovic M(2), Lamot L(3), Stepan J(2), Harjaček M(3), Vidović M(3)
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Fever is the most common cause for which children and their caregivers seek medical attention. If accompanied by elevated blood inflammatory markers, infectious diseases are suspected. However, if microbiological findings are negative, and if there is no response to antimicrobial therapy, more careful and comprehensive evaluation is required. Amongst many disorders, one of the rare but oftentimes misdiagnosed cause is Castleman disease (CD). This is a heterogeneous group of lymphoproliferative disorders with similar histopathologic features divided into three types. Unicentric CD involves one or more enlarged lymph node(s) in a single region of a body while multicentric Castleman disease involves multiple regions of lymphadenopathy and is further subclassified in HHV-8 positive and HHV-8 negative/idiopathic type.

We present a case of a 4.5-year-old boy who came to our pediatric emergency department with a history of intermittent fever for almost a month, cough, skin rash with spontaneous regression, fatigue, periodic leg pain, night sweats, and weight loss. The physical examination showed few mildly enlarged cervical lymph nodes, pale skin, antalgic gait and fever. Routine blood tests revealed elevated C-reactive protein level and erythrocyte sedimentation rate, anemia, and thrombocytosis. He was admitted to a Pediatric Rheumatology department for evaluation. Other laboratory tests showed elevated fibrinogen,
Abstracts

435  **SEVERE SKIN MANIFESTATIONS IN PATIENTS WITH HENOCHE-SCHOLEIN PURPURA (HSP) IN FIVE TERTIARY CENTRES IN CROATIA BETWEEN 2009 AND 2019**

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To evaluate characteristics of patients with severe skin manifestations of Henoch Scholein purpura (HSP) in five tertiary centres in Croatia in time period from 2009 until 2019.

Retrospective statistical chart analysis of clinical symptoms and laboratory parameters of patients with HSP was done. Severe skin manifestations were defined as haemorrhagic bullous, ulcerated or necrotic lesions.

During observed time period 583 patients (303 boys and 280 girls) were admitted to hospital due to HSP. Prevalence of severe skin manifestations was 2.41% (14 patients, CI 1.32 – 4.00%). Severe skin manifestations occurred more often in boys than in girls with a difference on a margin of statistical significance (11 boys, 3 girls, p=0.057). Patients with severe skin manifestations were more prone to relapses than those with milder skin forms (severe 28.57%, milder 18.66%), with most notable difference in patients with 2 relapses of disease (severe 28.57%, milder 18.66%), with statistical difference in other clinical symptoms and laboratory parameters. Only blood leukocyte levels were near to statistical significance with higher levels in patients with severe skin manifestations (12.1*10^9/L (SD 10-17.6):10.71*10^9/L (SD 8.45-13.42), p=0.059).

Patients with severe skin manifestations of HSP were more prone to relapses, and had gastrointestinal symptoms more often affected than those with milder forms, but less often had infectious trigger isolated. There was no significant statistical difference in other clinical symptoms and laboratory parameters. We couldn’t set preventive model for disease outcome based on these data. Small number of patients with severe manifestations and retrospective data analysis could be the reason. Perhaps better structured prospective trial would be more appropriate in that sense.

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436  **DISLIPIDEMIA AS AN ATHEROGENIC FACTOR IN PATIENTS WITH DIFFERENT FORMS OF JUVENILE ARTHRITIS**

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Close connection between autoimmune inflammation and proatherogenic lipid changes in rheumatoid arthritis has been well established, while for juvenile idiopathic arthritis (JIA) is under discussion. The aim of our work was to study the incidence and intensity of lipid disturbances in patients with different forms of JIA.

90 children with JIA 6-18 years were examined using clinical, biochemical methods, ultrasonic duplex scanning of vessels, thin-layer chromatography, bioimpedance measurement. 49 children without chronic diseases made up the control group.

Dyslipidaemia, was revealed in 48.9% of patients, mainly with systemic and polyarthritis Most often an increase in atherogenic coefficient (AC) was noted. Average AC value in JIA patients was higher than in control group (2.9 ± 0.2 versus 2.0 ± 0.1, p <0.05) and correlated with the disease activity index according to JADAS71 (r = 0.78), a doctor’s global assessment of the disease severity according to VAS (r = 0.61), the degree of joints dysfunction (r = 0.55), C-reactive protein (r = 0.53) and ESR (r = 0.68) level. An increase in the concentration of total cholesterol was observed in 28 (31.1%) children with JIA, commonly with a long-lasting disease, and in case of CS intake. In some JIA patients atherogenic changes were detected due to apolipoprotein A1 (ApoA1) deficiency (26.7%). Patients with JIA (maximum with ferritin and d-lenser levels, with high C3, IL-6 and TNF-alpha levels. Microbial cultures (blood cultures, nasopharyngeal and throat swab) were sterile, and serology for Cytomegalovirus, Epstein-Barr virus, Human parvovirus B19 and Bartonella henselae were negative, while serology for Mycoplasma pneumoniae (IgM and IgG) was positive. Azithromycin was prescribed, but fever and elevated inflammatory blood markers persisted and other procedures were performed to rule out infectious disease. Radiogram and bone scintigraphy were unremarkable, but an ultrasound revealed a retroperitoneal mass. MRI was performed, and retroperitoneal mass measuring 3x2.5 cm, arising from the pancreas and suspected to be a neuroendocrine tumor or enlarged lymph node, along with hepatosplenomegaly was described.

FDG-positron emission tomography (PET)/CT showed a mass near the pancreas with moderately increased FDG uptake. Complete surgical resection of the mass was performed, and the histopathological evaluation revealed lymphoid hyperplasia consistent with the hyaline vascular type of Castleman disease.

An immunohistochemical study excluded HHV-8 positivity. After the surgical procedure, the patient recovered completely. On follow up visits he was without fever or other symptoms suggestive of the disease, with normal laboratory findings.

CD with systemic manifestations is rare in children emphasizing the need for thorough evaluation of unexplained prolonged symptoms.