known about the association between those diseases and rheumatic disorders during childhood, such as juvenile idiopathic arthritis (JIA).

**Objectives:** Our objective was to evaluate the correlation between the thyroid function and the clinical presentation in children with juvenile idiopathic arthritis.

**Methods:** Ninety-seven children (56 female, 41 male, median age 9.57 years, range 1.1–17.5 years) with juvenile idiopathic arthritis were evaluated. All patients underwent thyroid function tests (TSH, free T4 and free T3), antithyroglobulin (TgA) and antiperoxidase (TPOA) antibodies. All patients had a thyroid high-resolution sonography examination. Patients with nodules on US examination, low-TSH level and/or high thyroid hormone levels or positive TPOA and/or TgA values were referred to thyroid scintigraphy. The gained data was correlated with disease activity indices. Thyroid autoimmunity was evaluated by fluorescence enzymatic immunoassays of TgA and TPOA antibodies, considering TgA >50 IU/ml and TPOA-100 IU/ml as positive values.

**Results:** Fifty-one of the cases were classified as oligoarticular, thirty-one as seronegative polyarticular, two as seropositive polyarticular, eleven as systemic, and two as enthesis-related juvenile idiopathic arthritis.

No cases of overt clinical and biochemical hypothyroidism were found among children with juvenile idiopathic arthritis. On opposite, mean thyroid free T3 levels were higher in 36.4% of cases and free T4 in 29.7% cases. Anti-TPO antibodies were found in 5 of 97 patients (5.15%) and anti-TG antibodies were found in 2 patients (2.06%). All patients with thyroid antibodies positives were females. The ultrasound examination of thyroid gland revealed abnormalities in 41% cases, most of them cystic changes (33.7%) and hypo-echogenicity (28.57%). In those patients with thyroid nodules on US examination, the thyroid scintigraphy did not reveal pathological activity or other processes. Although, 2 patients presented mean thyroid volume above 2SD according their age reference values. An increased vascular flow pattern on Doppler examination of thyroid gland was found in 26% cases. Correlation and regression analysis showed low age at diagnosis and longer duration of the disease to be predictors for those thyroid disorders.

**Conclusion:** These data seem to suggest careful monitoring of thyroid function and thyroid autoantibodies just in children with juvenile idiopathic arthritis presenting clinical symptoms of thyroid involvement.

**REFERENCES**


**Disclosure of Interests:** None declared

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**AB0964**

**DIAGNOSIS OF CROHN’S DISEASE IN PATIENTS WITH PRIMARY RHEUMATOLOGICAL MANIFESTATIONS**

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**Background:** Sometimes Crohn’s disease (CD) manifests initially with rheumatological symptoms. Therefore, there’s an important for a rheumatologist to recognize this pathology correctly and timely.

**Objectives:** To present cases of CD, referred to V.A. Nasonova Research Institute of Rheumatology.

**Methods:** Case series of 7 pts (5 boys, 2 girls) with initial rheumatological condition who developed CD. All pts were subjected to standard rheumatological examination. CD diagnosis was suggested by a rheumatologist and confirmed in gastroenterology hospital.

**Results:** Mean age at CD onset was 12.7±3.98 yrs, varying from 5 to 17 yrs. In 4 pts gastrointestinal (GIT) symptoms manifested simultaneously with rheumatological, in 2 pts GIT symptoms were delayed for 4 and 5 years. The time-interval from the onset of first symptoms until establishing CD diagnosis varied from 2 months till 6 years, averaging to 9±3.8 months. The list of initial rheumatological diagnoses included the following entities: juvenile idiopathic arthritis (JIA) with oligoarticular onset – in 5 pts, and systemic onset JIA – in 2 pts. In all cases arthritis manifested initially as an oligo-involvement of a lower limb joints. High active sacroiliits with deep bone oedema was detected by MRI in 5 pts. Fever was present in 5 pts, uveitis – in 1, cutaneous psoriasis – in 1. Other documented symptoms included: weight loss (3), hepatosplenomegaly (1), lymphadenopathy (1), spondylosis (1), nodular erythema (1), erythematous rash (1). HLA B27-antigen positivity was established in 3 pts out of 5 examined. All pts had significant increase in CRP and ESR levels and WBC counts; (additionally 3 examined for calorproctin cases demonstrated significant increase of its’ concentration (>1000 μg/l).

**Conclusion:** CD, including UC, should not be missed and ruled out in all pts with oligoarticular and systemic JIA onset. Rectal calproctitis should be checked in suspected CD cases among individuals with rheumatologic symptoms. Special attention should be given to cases manifesting during puberty, accompanied by weight loss, fever, GIT symptoms, increased levels of acute phase inflammatory markers. MRI stir lesion may be as suspected of IBD especial CD.

**Disclosure of Interests:** None declared

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**AB0965**

**PAEDIATRIC SACROIDOSIS: A PROFESSIONAL IMITATOR**

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**Background:** Sterile granulomatous inflammation is a hallmark of disorders covered by the term paediatric sarcoidosis1, a rare disease classified among autoinflammatory conditions. While the classical triad of arthritis, uveitis and dermatitis associated with the NOD2 gene mutation is typical for Early-onset sarcoidosis (EOS), mutation-negative disease has extremely variable phenotype in children and can mimic various other conditions.

**Objectives:** To illustrate variability of clinical presentation of sarcoidosis in a cohort of children from 2 collaborating paediatric rheumatology units.

**Methods:** Retrospective case analysis.

**Results:** Seven Caucasian patients (2 boys) followed for a median of 1 (0.2-12) year were identified (Table). Patients 1 and 3 presented with typical rash (with biopsy-proven granuloma), polyarthrictis and severe, treatment-resistant uveitis which has never been fully controlled. Patient 2 presented with recurrent self-limited febrile episodes and was investigated for periodic fever syndrome. Within 3 months she developed erythema nodosum-like rash, granulomatous uveitis and arthritis. In 4 patients with disease onset after 10 years of age two major organ systems were affected: renal and gastrointestinal (GIT). In patients 4 and 5 renal biopsy performed for insufficiency showed tubulointerstitial nephritis with granulomas. Patients 6 and 7 had been initially treated for “atypical inflammatory bowel disease” with granulomas on biopsy. In both of them finding of granulomatous uveitis eventually lead to the diagnosis of sarcoidosis.

Additional symptoms are listed in the Table. Presence of granulomatous inflammation was confirmed in all patients. Chronic uveitis was present in 6/7 patients and was an important diagnostic clue in EOS as well as adult-type of sarcoidosis while respiratory tract was affected subclinically in 2 older patients only. Apart from combinations of clinical symptoms elevation of chitotriosidase significantly aided diagnostic process and when available, it also reflected disease activity. (1) Pt – patient, F – female, M – male, Dx – diagnosis, CS – corticosteroids, MTX – Methotrexate, ADA – Adalimumab, MMF – Mycophenolate mofetil

<table>
<thead>
<tr>
<th>Pt</th>
<th>Sex</th>
<th>Age (yr) at Onset/Dx</th>
<th>NOD2 gene mutation</th>
<th>Manifestations</th>
<th>Chitotriosidase N 4.4-89 nmol/ml/h</th>
<th>Therapy</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>F</td>
<td>0.25/4</td>
<td>R334Q</td>
<td>Rash, fever, uveitis, arthritis, meningitis</td>
<td>299</td>
<td>MTX, ADA, MTX, CS, ADA, CS</td>
</tr>
<tr>
<td>2</td>
<td>F</td>
<td>6/6</td>
<td>Negative</td>
<td>Rash, fever, uveitis, arthritis, panniculitis</td>
<td>433</td>
<td>MTX, ADA, MTX, ADA, CS, ADA</td>
</tr>
<tr>
<td>3</td>
<td>M</td>
<td>1/3</td>
<td>Variants</td>
<td>Rash, fever, panartitis, arthritis, liver granuloma</td>
<td>N/A</td>
<td>CS, MTX, ADA, ADA, Infliximab</td>
</tr>
<tr>
<td>4</td>
<td>M</td>
<td>4/15</td>
<td>Pending</td>
<td>Fever, arthralgia, lymphadenopathy, granulomatous nephritis</td>
<td>N/A</td>
<td>CS, MMF</td>
</tr>
<tr>
<td>5</td>
<td>F</td>
<td>13/13</td>
<td>Negative</td>
<td>Uveitis, granulomatous nephritis, hearing loss</td>
<td>604</td>
<td>CS, MTX, ADA</td>
</tr>
</tbody>
</table>

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1 Background of Interests: None declared

**Disclosure of Interests:** None declared