P001

Could early presentation and diagnostics predict JIA: an analysis of pediatric patients presenting to ped with non-traumatic joint pain

D. Karakaitė[1], E. Ambrozaite[2], A. Sanipaitiene[3,4], L. Jankauskaite[3,4]
[1]Lithuanian University of Health Sciences, Kaunas, Lithuania; [2]Medical Academy; [3]Department of Pediatrics, Lithuanian University of Health Sciences; [4]Department of Pediatrics, Hospital of Lithuanian University of Health Sciences Kauno Klinikos, Kaunas, Lithuania
Correspondence: A. Sanipaitiene
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Introduction: Juvenile idiopathic arthritis (JIA) is chronic autoimmune disorder characterized by inflammation of one or more joints leading to stiffness, swelling, and pain. Early JIA diagnosis and treatment can improve outcomes. Many other diseases can mimic initial episode of JIA; thus, it is crucial to identify early signs of chronic disease.
Objectives: We aimed to determine distribution of symptoms and treatment as well as most frequent diagnostic tests in patients presenting with joint pain to a pediatric emergency department (PED).
Methods: Retrospective data analysis from electronic healthcare record system was conducted. Data of all children presenting to PED complaining of joint pain January 2018-February 2022 were analysed. Cases were divided into two groups: children progressing to chronic form of the disease (JIA), and those who did not (nJIA). Statistical data analysis was performed using SPSS 29.0. P value <0.05 was considered significant.
Results: Data of 110 children (55 JIA, 55 nJIA) were analysed; 63.6% were female. Median age was 12 (6-15) and did not differ in both groups. Median days from the onset of symptoms did not differ (61d as for JIA vs 31d as for nJIA, p>0.05). Pain was predominant symptom in both groups (92.73%-JIA; 89.1%-nJIA). Children complained of joint swelling and joint stiffness more frequently in JIA group compared to nJIA (74.5% vs 47.3% and 41.8% vs 29.1% respectively).
In PED, CBC was performed in 99.09% (n=109) cases, ESR in 93.64% (n=103). However, only eosinophil count was higher in JIA compared to nJIA (0.2x10*9 (0.1;0.32) vs 0.13x10*9 (0.08;0.2)). All were referred to pediatric rheumatologist. During follow-up, ANA was tested in 84.5% (n=94). 54.5% (n=61) had positive result of which 62.3% were from JIA group. In PED, 105 children (95.5%) received joint ultrasound. Effusion was found in 75 patients (71.4%), of which 56% belonged to the JIA group. In the same group, one joint involvement prevailed (n=30, 60%), polyarthritis was diagnosed only in 3 patients (6%). Less than half of nJIA patients (n=22, 40%) presented with no joint pathology in ultrasound. All patients were prescribed NSAIDs in PED.
Conclusion: Our research uncovered that the pain symptom predominated in both patients with subsequent JIA and without at the visit to PED. None of investigations in PED was able to identify chronic disease. Therefore, all patients suspected of nontraumatic joint pain should be referred to pediatric rheumatologist.

Patient Consent
Not applicable (there are no patient data)

Disclosure of Interest
None declared

P002

Etiology and characteristics of arthritis in children

A. Demir[1], N. Çakar[2], Z. B. Özçakar[2], F. Aydin[2], G. Vatansever[1], T. Uçar[3], E. Çiftçi[4], E. Ünal[5], F. Yalçinkaya[2]
[1]Department of Pediatrics; [2]Pediatric Rheumatology; [3]Pediatric Cardiology; [4]Pediatric Infectious Diseases; [5]Pediatric Oncology, Ankara University School of Medicine, Ankara, Türkiye
Correspondence: F. Aydin
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Introduction: Arthritis is described as an inflammation of the joint. Arthritis in children could be one of the clinical signs of many different diseases.
Objectives: The aim of this study is to evaluate the etiology of arthritis in children.
Methods: Files of patients who were diagnosed with arthritis between "January 2016 - December 2019" in Ankara University Faculty of Medicine were retrospectively evaluated.
Results: The mean age of 424 patients included in the study was 8.68±4.30 (0.07-17.92) years, and 218 (51.4%) were girls. Fifty-two percent of the patients had rheumatic disease (19.6% juvenile idiopathic arthritis [JIA], 16.3% autoinflammatory disease, 14.2% vasculitis, 1.7% autoimmune connective tissue disease), 23.6% had reactive arthritis (RA), 12% had acute rheumatic fever (ARF), 5.2% had malignant disease, 4.7% had septic arthritis, and 2.8% had orthopedic disease. The most commonly involved joint was the knee (55%). Monoarticular involvement was more common in septic arthritis (85%), malignant diseases (77%), reactive arthritis (71%), and orthopedic diseases (66.7%). Forty-five percent of the patients with ARF had migratory arthritis, and 29.4% had monoarthritis. The majority of the patients (68.9%) presented with acute arthritis, and these rates were 92% in RA, 98% in vasculitis, 90% in septic arthritis, and 82.4% in familial Mediterranean fever (FMF). Chronic arthritis was more common in patients with JIA, chronic recurrent multifocal osteomyelitis (CRMO), and non-leukemia malignant diseases than the others (p<0.001). The history of recurrent arthritis was high in patients with Behçet's disease (BD), FMF, CRMO, JIA, and autoimmune connective tissue diseases (100%, 86.3%, 81.8%, 73.5%, and 71.4%, respectively). Among nine patients with leukemia, 5 of them were misdiagnosed as having other diseases (3 RA, 1 ARF, and 1 traumatic arthritis).
Conclusion: Arthritis in children could be one of the clinical signs of many different diseases. Rheumatic and infectious causes were detected as the major etiologic factors of arthritis in childhood in our center. It should also be kept in mind that arthritis may be a manifestation of malignant diseases.

Patient Consent
Not applicable (there are no patient data)

Disclosure of Interest
None declared

P003

The incidence and prevalence of juvenile idiopathic arthritis differs by ethnic group in England

R. P. Beesley[1], K. Hyrich[1,2,3], J. H. Humphreys[1,2]
[1]Centre for Epidemiology, University of Manchester; [2]Kellgren Centre for Rheumatology, Manchester Royal Infirmary; [3]National Institute for Health Research Manchester Biomedical Research Centre, Manchester, United Kingdom
Correspondence: R. P. Beesley
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Introduction: Juvenile Idiopathic Arthritis (JIA) is a heterogenous group of autoimmune disorders characterised by chronic joint inflammation, affecting children and young people (CYP) under the age of 16. The association between ethnicity and JIA has not been investigated previously in the UK context. Differential rates between ethnic groups could be indicative of underlying biological differences and/or health inequities.
Health inequities (avoidable systemic differences in health outcomes for different population groups) may lead to specific ethnic groups being less likely to be referred resulting in delays in diagnosis and apparent differences in incidence rates.
Objectives: To calculate and compare the incidence and prevalence rates of JIA in different ethnic groups in England.
Methods: CYP with JIA were identified in anonymised electronic primary care records (the Clinical Practice Research Datalink (CPRD) Aurum database) using pre-defined read code lists between 1

PReS 2023 Abstract Submission

JIA (oligo, poly, psoriatic)

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ETIOLOGY AND CHARACTERISTICS OF ARTHRITIS IN CHILDREN

AYKUT DEMİR[1], NİLGÜN ÇAKAR[2], ZEYNEP B. ÖZÇAKAR[2], FATMA AYDIN[*2], GÖKSEL VATANSEVER[1], TAYFUN UÇAR[3], ERGİN ÇİFTÇİ[4], EMEL ÜNAL[5], FATOŞ YALÇINKAYA[2]

[1]Department of Pediatrics, [2]Pediatric Rheumatology, [3]Pediatric Cardiology, [4]Pediatric Infectious Diseases, [5]Pediatric Oncology, Ankara University School of Medicine, ANKARA, Türkiye

What is your preferred presentation method?: Poster only (in-person)
I would like to submit this abstract for: PReS Congress only
Is this abstract submission led by a health professional (non-doctor)?: No
Is this abstract a case report?: No

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Disclosure of Interest: None Declared