

for rheumatoid arthritis (RA), Yamaguchi criteria for adult Still's disease and ASAS criteria for spondyloarthritis.

Results: 112 patients were included: 17 systemic JIA, 26 polyarticular JIA, 19 oligoarticular JIA, 41 ERA and 9 psoriatic arthritis. The median age of transition was 19 years old. Eight cases of uveitis were observed among patients with oligoarticular JIA and 7 with ERA. Radiographic structural damages were assessed and showed 15% of patients with erosions or carpalis, mainly in polyarticular and systemic JIA patients. 29% of patients with ERA displayed sacroiliitis. In comparison with adult rheumatism, 42% of patients with systemic JIA fulfilled Yamaguchi criteria and 23% of patients with polyarticular JIA fulfilled ACR/EULAR criteria for RA. 41% of patients with oligoarticular JIA, 73% with ERA and 100% with psoriatic arthritis fulfilled ASAS criteria for spondyloarthritis.

Conclusions: Our study confirmed the articular destructive potential of polyarticular and systemic JIA and an ocular risk in oligoarticular JIA. Comparison of JIA criteria to adult rheumatism criteria showed that polyarticular JIA with positive rheumatoid factor fulfilled ACR/EULAR criteria for RA. However, oligoarticular JIA and polyarticular JIA without rheumatoid factor did not fulfill any adult rheumatism criteria and seem to be paediatric entities. Finally, most patients with ERA and psoriatic arthritis fulfilled the ASAS criteria for spondyloarthritis.

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AB0946 CALCINOSIS IN CHILDREN WITH JUVENILE DERMATOMYOSITIS FROM A SINGLE-CENTRE IN NORTH INDIA

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Background: Juvenile dermatomyositis (JDM) is a rare childhood autoimmune inflammatory muscle disorder that can result in severe disability or death. Calcinosis is a unique and a poorly understood long-term complication of JDM (1). Calcinosis can present in various forms like nodular calcinosis, tumoral deposits, calcinosis universalis.

Objectives: We present here the images of calcinosis in children with JDM
Methods: All children diagnosed to have JDM and registered in Pediatric Rheumatology Clinic at Post Graduate Institute of Medical Education and Research, Chandigarh, India, were evaluated for presence of calcinosis. Consent was taken from patients or caregivers

Results: A total of 36 patients were evaluated. Twelve (33.33%) patients had calcinosis (Fig 1). Interestingly, 4 children had calcinosis at the time of diagnosis



Figure 1. Calcinosis in children with JDM. Radiographs showing Calcinosis in children with JDM

Conclusions: Calcinosis is a distinct complication of JDM which is uncommon in inflammatory myopathies in adults (2). Calcinosis can be disabling and disfiguring.

It may not be obviously visible in all patients and radiographs help reveal the extent of involvement.

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AB0947 CHARACTERISTICS OF A TRANSITION CLINIC FOR YOUNG PEOPLE WITH RHEUMATIC DISEASES

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Background: Paediatric rheumatologic diseases can still be active in the adulthood. Transitional care units are very important for the transition from paediatric to adult health care system.

Objectives: To describe the demographic characteristics, paediatric rheumatologic diseases distribution and active treatments in a Rheumatologic Transitional Care Unit (RTCU).

Methods: We included all new patients who attended the RTCU of a tertiary level hospital from 1st September 2015 until 31st December 2016. These patients were remitted from the paediatric rheumatology unit of two tertiary level hospitals. We retrospectively analyzed their demographic, laboratory and treatment characteristics. The connective tissue diseases (CTD) group included systemic lupus erythematosus, Behçet disease, dermatomyositis and scleroderma. Patients were considered active according to the physician opinion.

Results: We attended 81 new patients. 59 were female (72.8%) and the median age (range) was 19 years (18.1–20.7). 65.43% were diagnosed with Juvenile Idiopathic Arthritis (JIA) and 12.35% with CTD. Table 1 shows the main baseline characteristics of the patients. In the first visit at the unit, half of the patients did not have any systemic treatment (41 patients [50.62%]). From the remaining 40 patients with systemic treatment, 16 patients (40%) were under biologic treatment, mostly anti-TNFα. In any of the two first appointments, 20 patients (24.7%) were active, most of them from the JIA group. Seven (35%) of these patients increased or changed the treatment, 6 of them initiating a biologic treatment.

Table 1. Demographic and treatment characteristics

	Total (n: 81)	Juvenile Idiopathic Arthritis (n: 53)	Connective Tissue Diseases (n: 10)
Gender, Women (%)	59 (72.83)	39 (73.58)	9 (90)
Age of disease onset - Median (IQR)	10.3 (4.5–14.2)	6.5 (2.1–12.9)	14.4 (11.5–15.6)
Arrival age at the unit - Median (IQR)	19 (18.1–20.7)	19.1 (18.1–21)	19 (18.4–20.5)
Active in the 2 first appointments N (%)	20 (24.69)	15 (28.30)	4 (40)
Antinuclear antibodies, N (%)	32 (39.50)	20 (37.73)	5 (50)
Uveitis at any time, N (%)	11 (13.58)	9 (16.98)	0
Without treatment at the arriving time, N (%)	41 (50.61)	23 (43.39)	5 (50)
sDMARD at arriving, N (%)	30 (37.03)	25 (47.17)	5 (50)
Biologic therapy at arriving, N (%)	16 (19.75)	13 (24.53)	0

sDMARD: synthetic disease-modifying antirheumatic drugs. IQR: Interquartile range.

Conclusions: Our RTCU received mostly JIA patients. Median age at arriving was slightly higher than expected. A fourth of patients were active in the transition moment. All this data highlights the need of a strict control of these patients in the transitional period.

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AB0948 INSUFFICIENT CALCIUM INTAKE IN PEDIATRIC POPULATION WITH RISK FACTORS FOR OSTEOPOROSIS

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Background: Compliance with daily calcium requirements in paediatric and young age is necessary to acquire peak bone mass, especially in populations that meet one or more risk factors for fractures

Objectives: To study the characteristics of the pediatric population with at least one risk factor for developing low bone mass/osteoporosis and to measure their calcium intake

Methods: Demographic and clinical data were prospectively collected from patients aged 2 to 20 years that met at least 1 risk factors for bone fragility, including: inflammatory diseases, treatment with Immunosuppressants and/or

corticosteroids, malabsorptive disorders, chronic systemic disorders such as nephropathies or hematologic diseases, etc. The patients or their legal tutors signed the Informed Consent in order to participate in the study. The average daily calcium intake was collected through the Spanish INDICAD 2001 study survey, together with a comprehensive anamnesis. If patients or their family reported taking food not included in the survey, its calcium content were consulted in the Spanish Food Composition Database published by the BEDCA Network of the Ministry of Health Science and Innovation

Results: Data were collected from 50 patients, with a mean age of 9.2 years (2–20), 28 (56%) female, 86% Caucasian, 6% Arab, 2% Asian and 6% Latin. The most frequent diagnoses were: Food intolerances/malabsorption: 32%, nephropathies: 22%, JIA: 16%, vasculitis: 10%, other inflammatory diseases: 8%. 42% had received systemic corticosteroids at some point, and 16% were receiving corticosteroids at present. Average daily calcium intake was 718 mg/d. They were divided by age groups, attending to daily calcium needs per group. In Table 1 we can observe the Recommended Daily Amount (RDA) of calcium by the Spanish Association of Pediatrics and the consumption collected, by age group.

Age group	% Age group	RDA (mg/d)	Average intake (mg/d) ± SD	Range: min–max (mg/d)	% That reaches RDA
Pre-escholar (2–3 a)	14%	700	819±280	513–1346	57.1%
Escholar (4–9 a)	32%	1000	702±240	254–1075	18.8%
Teenagers (10–17a)	48%	1300	689±350	350–1925	8.3%
Young (18–20 a)	6%	1100	797±182	621–985	0%

Only 3 children with low calcium intake were taking supplements. A decrease in calcium RDA adherence was observed with increasing age, statistically significant ($p=0.009$). There was also a lower calcium intake in the non-Caucasians compared to Caucasians statistically significant ($p=0.044$), which was not associated with age.

Conclusions: Calcium intake in the population under 21 years old with at least 1 risk factor for developing low bone mass/osteoporosis is lower than recommended. In addition, recommendations are based on the physiological needs of the healthy population and it could be expected to be insufficient for those with chronic diseases. It should be noted that calcium intake in the groups with higher requirements (adolescents and young people) is lower, with a reduction in the proportion of patients who meet the compliance with the RDA as age increases. Studies with a larger population are needed to ratify these results together with serum calcidiol levels

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AB0949 THE ANNUAL COST OF PATIENTS WITH JUVENILE IDIOPATHIC ARTHRITIS

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Background: The management of juvenile idiopathic arthritis (JIA) includes various methods including such as medication, hospitalization, rehabilitation.

Objectives: To determine how much juvenile idiopathic arthritis cost; the components of this cost; how new treatments, i.e. biologics, improve the disease course and hospital expenditures.

Methods: This study was conducted in Dokuz Eylul University, Pediatric Rheumatology Unit between March 2015–March 2016. One-hundred six JIA patients who had a follow-up period of at least 1 year according to International Edmonton 2001 criteria were included. This retrospective cost study evaluated the data of these patients and calculated the direct cost for the follow-up period. Clinical data was collected from patient files that were in department's archive and cost data was gathered from Probel Hospital Information Management system. Patient data form covering sociodemographic and clinical information, patient drug form and annual medical cost form was filled out for each patient.

Results: 58.5% (n=62) of patients was female and 41.5% (n=44) was male. The mean age was 12.0±4.3 years. 34.0% (n=36) of patients was oligoarticular type, 28.3% (n=30) was polyarticular type, 22.6% (n=24) was enthesitis related arthritis (ERA), 8.5% (n=9) was psoriatic type and 6.6% (n=7) was systemic type. The cost of medication counted for 88.3% (453244.94 TL) of total direct annual cost. Total direct medical cost was highest for ERA (n=7742.55±9891 TL). While the annual cost was calculated as 10451 TL per person for biologic using patients, for the patients using non-biologic treatments it was determined as 1472 TL per person. 1 TL=0.32 € 1 TL=0.35 \$

Conclusions: Medication is responsible for most of the total direct medical cost in patients with JIA. Our results showed concordance with previous studies on the subject. This situation could be attributed to biologic agents that are being used in treatment in recent years. More prospective studies on the effectiveness of cost of treatment, with greater amount of patient and more homogenous subgroups are needed.

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AB0950 PREDICTORS OF RESPONSE TO ETANERCEPT TREATMENT DEPENDING ON JUVENILE IDIOPATHIC ARTHRITIS CATEGORY

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Background: Anti-TNF biologics are highly effective and widely used in clinical practice for the treatment of JIA. However, some children lack of response with few reliable predictors of a good or poor response to treatment found [1–3]. As clinical picture patterns are significantly differ for 7 JIA subclasses, we propose to find predictors of response to therapy for each of JIA category.

Objectives: To identify clinical and laboratory parameters associated with response to etanercept treatment in 12 months in patients with different JIA category.

Methods: Patients from four JIA categories (n=195) were divided to groups with excellent, intermediate and poor response after 12 month treatment with etanercept according to ACR-Pedi criteria, achieving inactive disease by Wallace criteria and JADAS-71 cut-off point. For each of JIA category univariate and multivariate logistic regression analysis was conducted to identify potential baseline factors associated with treatment response. Baseline factors included clinical, laboratory and anamnestic data.

Results: From total cohort 91/90/85/68.5 percent of patients achieved ACR30/50/70/90 in one year etanercept treatment; 45.5% patients were considered excellent responders, 30% - intermediate responders, and 24.5% - poor responders. Highest efficacy of therapy was shown in persistent oligoarthritis patient, lowest – in enthesitis-related arthritis and polyarthritis patients. Potential baseline predictors of excellent and poor response which were significant are described in the table.

JIA category	Predictors of excellent response	Predictors of poor response
Persistent oligoarthritis	smaller amount of DMARD	–
Extended oligoarthritis	shorter disease duration (DD)	–
Enthesitis-related arthritis	–	– longer DD
RF-negative polyarthritis	– smaller number of joints with limited range of motion (LOM)	– longer DD
	– lower CRP level at the baseline	– older ADO
	– younger age at disease onset (ADO)	

Analysis showed that poor response in all JIA categories was mainly associated with demographic data (longer DD and older ADO). However, factors associated with excellent response significantly differed depending on JIA category (anamnestic factors, number of involved joints, laboratory factors, and demographic factors).

Conclusions: Response to etanercept therapy is strongly associated with JIA category. Shorter disease duration and lower number of DMARDs used before start of etanercept, lower number of joints with LOM, and lower C-reactive protein at baseline are predictors of better response to etanercept.

References:

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AB0951 FACTORS ASSOCIATED WITH RESPONSE TO ADALIMUMAB TREATMENT IN JUVENILE IDIOPATHIC ARTHRITIS

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Background: Tumor necrosis factor inhibitors are highly effective and safe in treatment of juvenile idiopathic arthritis (JIA). Nonetheless, to select the optimal therapy and to achieve maximum therapeutic effect it is necessary to consider the individual characteristics of the patient. Adalimumab (ADA) is widespread use for mild and severe polyarticular JIA especially in the presence of uveitis, but there is lack of data about clinical and laboratory predictors of response to ADA in different JIA categories.

Objectives: To identify clinical and laboratory parameters associated with