Background: Juvenile Idiopathic Arthritis (JIA) is a heterogeneous group of pediatric diseases. Different response to biological treatment (BT) has been reported according to disease subtype.
Objectives: To analyze the prescription and withdrawal of BT in JIA patients with focus on JIA category.
Methods: A retrospective observational study was conducted on JIA patients followed in a referal hospital and who had received at least one BT between 1999 and 2019.
Results: 130 JIA patients were analyzed: 29 (22,4%) were Oligoarticular Persistent (OligP), 22 (16,9%) Enthesitis related Arthritis (ERA), 20 (15,4%) Systemic (sJIA), 19 (14,6%) Polyarticular RF- (PolyRF-), 14 (10,8%) Polyarticular RF+(PolyRF+), 13 (10%) Oligoarticular-Extended (OligE), 11 (8,4%) Psoriatic Arthritis (APso) and 2 (1,5%) Undifferentiated (Und).
The main characteristics are summarized in table 1.
The first line BT most frequently indicated was Etanercept up to 40% in all the categories except for ERA, where the most frequent BT was Adalimumab and sJIA, where the most frequent BT was Anakinra. The time between diagnosis and start of BT was different among the categories (p=0,007). In the Und category, the time until BT was the shortest (median: 1 month), since both patients had coxitis, followed by APso [median: 9 months IQR(1-57)] and sJIA [median: 17,5 months IQR(0,3-146,8)]. The survival of the first BT was different among the categories (p=0,006): 94,7% of the ERA continue receiving the first BT, followed by 76,2% of OligP and 50% of PolyRF+ and APso. Only 42% of sJIA continue on the first BT prescribed [up to 53,3% were TNF inhibitors (TNFi)]. The categories with less retention of the first BT were: OligE (25%); PolyRF- (27,3%) and Und (0%). The most frequent cause of discontinuation, among these categories, was secondary failure.
In the survival analysis between categories, there were differences on OligP (p=0,004), OligE (p=0,042) and PolyRF- (p=0,017). Tocilizumab and Adalimumab were the BT with highest survival with regards to Infliximab, Etanercept, Rituximab (OligE, PolyRF-), Abatacept (OligE, PolyRF-) and Certolizumab (OligP). The survival rate of IL1 inhibitiors and IL6 inhibitiors was higher regarding to TNFi in sJIA patients (p=0,013).
Conclusion: Taking into account JIA category is mandatory to choose BT and to understand the response and discontinuation of BT. OligE and PolyRF - showed a high rate of change of the first BT related to secondary failure of Etanercept and Infliximab when compared to Adalimumab and Tocilizumab, as described in the survival analysis. The category with the highest retention of the first BT was ERA. UND patients started sooner BT due to the presence of coxitis. In sJIA, IL1 inhibitors and IL6 inhibitors were superior to TNFi in the survival analysis, as reported in existing literature.

Table:

Table 1	OligP	ERA	sJIA	PolyRF-	PolyRF+	OligE	Apso	UND
Sex,n% M F	 4(13,8) 25(86,2)	 17(77,3) 5(22,7)	 11(55) 9(45)	 2 (10,5) 17(89,5)	 2(14,3) 12(85,7)	 1(7,7) 12(92,3)	 4(36,4) 7(63,6)	 1(50) 1(50)
Age at diagnosis me, IQR	4 (2,6-5)	12 (9,8-15)	7 (3-13)	8 (2-13)	12 (8,5-15)	3,5 (2-8,3)	12 (3-15)	12,5
Uveitis,n%	12(41,4)	7(31,8)	0(0)	3 (15,8)	0 (0)	3(25)	2 (18,2)	1(50)
ANA, n (%) ACPA, n (%) B27, n (%)	22(75,9)	 18(81,8)		8 (42,1)	12 (85,7) 9(64,3)	9(75)	5 45,5) 3(27,3)	
BT lines: n	1ª: 29 2ª: 11 3ª: 1	1ª: 22 2ª: 2	1ª: 20 2ª: 10 3ª: 5 4ª: 1 5ª: 1	1ª: 11 2ª: 9 3ª: 6 4ª: 3	1ª: 14 2ª: 7 3ª: 2 4ª: 2	1ª:13 2ª: 9 3ª: 2 4ª: 1 5ª: 1	1ª:11 2ª: 5 3ª: 4 4ª: 3 5ª: 1	1ª:2 2ª:2

APso, Psoriatic Arthritis; BT, biological treatment; ERA, Enthesisits related Arthritis; F, female; M, male; OligE, Oligoarticular-Extended; OligP, Oligoarticular-Persistent; PolyRF-, Polyarticular RF-; PolyRF+, Polylarticular RF+; sJIA, Systemic JIA; Und, Undifferentiated

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AB0985

THE EFFECT OF GENDER ON CHILDREN AND ADOLESCENTS WITH FAMILIAL MEDITERRANEAN FEVER

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Background: In the literature, it was reported that children with with Familial Mediterranean fever (FMF) have lower functional capacity and muscle strength than healthy children. With reduced functional capacity, daily activities are negatively affected. The individual starts to adopt an inactive lifestyle and decreases in muscle strength are observed. A vicious circle occurs and results in exacerbation of symptoms and worse quality of life.
Objectives: The aim of this study is to investigate the effect of gender on dynamic muscular endurance, physical activity and quality of life with FMF.
Methods: Forty-eight children and adolescents (26 girls, 22 boys, mean age=12.43±3.04 years, age range=7-18 years) were included. Exclusion criteria:The presence of another disease. Intraarticularsteroid injection or surgery in any joint in the last 3 months. Evaluations were made by the same pediatric rheumatologist and physiotherapist by face to face interview method. Dynamic muscle endurance was evaluated by use of curl up test (30 sec), push up test (30 sec) and one-legged stationary hop test (15 sec); physical activity level by Physical Activity Questionnaire and quality of life by Pediatric Quality of Life Inventory (PedsQL) 3.0 Arthritis Module. Physical Activity Questionnaire contains nine items and evaluates physical activities in last seven days and frequency of these activities. As score increases, level of physical activity increases. In this study, child and parent forms of PedsQL were used to evaluate the quality of life. High scores mean high quality of life. Independent Samples Test was used in the analysis because the data fit the normal distribution.
Results: Difference was significant in Physical Activity Questionnaire (p=0.028) in favor of girl gender whereas in child form (p=0.017) and parent form (p=0.040) of PedsQL (p=0.003) in favor of boy gender.
Conclusion: We see that the physical activity are lower in children and adolescents with FMF who have a gender of girls and, accordingly, lower quality of life. Therefore, we believe that these individuals should increase their physical activities.
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Table 1. Demographic characteristics

Variables	Girls (n=26)	Boys (n=22)
	M±SD	M±SD
Age (years)	12.96±2.91	11.86±3.24
Body weight (kg)	42.76±12.55	40.17±11.89
Height (m)	1.50±0.13	1.48±0.15
BMI (kg/m^2)	18.25±2.90	17.85±3.39
Age of onset (years)	7.57±4.07	7.22±3.99
Dose of colchicine (per day)	1.18±0.60	1.63±0.68
Duration of treatment (years)	5.30±2.90	4.61±3.34
C-reactive protein (mg/dl)	0.88±2.28	1.25±2.91
Pras et al severity score	6.35±2.68	5.31±2.60
	n (%)	n (%)
FMF in the family (Yes/No)	4(15.4)/16(61.5)	12(54.5)/10(45.5)
Arthritis (Yes/No)	9(34.6)/17(65.4)	6(27.3)/16 (72.7)
Arthralgia (Yes/No)	20(76.9)/6(23.1)	14(63.6)/ 8(36.4)
Knee (Yes/No)	6(23.1)/20(76.9)	7(31.8)/15 (68.2)
Elbow (Yes/No)	1(3.8)/25(96.2)	0(0)/22(100)
Ankle (Yes/No)	6(23.1)/20(76.9)	7(31.8)/15(68.2)
Hand (Yes/No)	1(3.8)/25(96.2)	1(4.5)/21(95.5)

Table 2. Comparison of data in terms of gender

Variables	Girls (n=26)	Boys (n=22)	p*
	M±SD	M±SD	
Curl Up Test (repeat)	10.70±3.58	12.80±3.66	0.075
Push Up Test (repeat)	10.55±5.06	11.75±6.29	0.511
One-legged Stationary Hop Test (repeat)	37.60±12.74	35.35±6.02	0.480
Physical Activity Questionnaire	16.93±5.70	20.70±5.77	**0.028**
PedsQL- child form	19.15±13.48	10.68±9.38	**0.017**
PedsQL- parent form	22.30±17.85	13.04±11.06	**0.040**

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AB0986

NT-PROBNP LEVEL IN PATIENTS WITH JUVENILE IDIOPATHIC ARTHRITIS

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