Making rational the therapeutic approach to Still's disease in children and adults

OP0197

THE INITIAL TREATMENT OF SYSTEMIC JUVENILE IDIOPATHIC ARTHRITIS: AN INTERNATIONAL COLLABORATION AMONG 10 REGISTRIES

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1: Medication Usage within First Year (pre/post 2012 where available)

	Glucocorticoids (IV+PO) %	Methotrexate %	Biologic %	Anti-IL-1 %	Anakinra %	Tocilizumab %
USA 2010-2011 n=9	22	56	33	33	33	0
USA 2012-2018 n=91	50	17	71	70	57	17
Canada 2005-2010 n=88	76	60	17	10	10	0
UK 2001-2011 n=69	78	71	10	3	3	0
UK 2012-2018 n=31	48	58	29	19	19	19
Portugal 2008-2011 n=73	42	36	4	3	3	0
Portugal 2012-2018 n=19	74	47	32	16	16	21
Sweden 2009-2015 n=50	96	46	62	30	28	30
Denmark 1997-2011 n=83	86	40	13	6	6	2
Denmark 2012-2018 n=32	50	12.5	75	63	63	19
Turkey 2000-2011 n=71	93	77	58	42	37	20
Turkey 2012-2018 n=114	98	52	40	32	28	9
Germany 2000-2011 n=271	73	62	13	7	6	<1
Germany 2012-2018 n=249	57	47	27	19	10	20
Norway 1997-2011 n=26	81	62	12	4	4	8
Norway 2012-2018 n=5	100	60	100	20	20	80
Finland 2006-2011 n=12	42	42	17	0	0	8
Finland 2012-2018 n=12	25	8	8	0	0	8

Background: The introduction of biologics has transformed care for children with systemic juvenile idiopathic arthritis (SJIA). Differences in treatment approaches between countries and how they have changed over time are not well studied.

Objectives: We contrast the initial features, treatment and 12-month outcome in SJIA across 10 JIA registers in Europe and North America.

Methods: Data were extracted locally from 10 Registers including manifestations at diagnosis, medication use over first year and outcomes (Physician Global Assessment (PGA), active joint count (AJC)) at 12 months. Data was compared before/after 2012 to assess change over time. Weighted (w) means were used to adjust for varying number of patients/Register.

Results: 1,149 patients; 553 had medication data for 2012-2018; primarily female and Caucasian; median age at diagnosis 5.3-8 years. Median duration of symptoms prior to first visit varied (0-3.3 months). Glucocorticoid (GC) use was common in the first year (w_average 72% (range 33-96%)). Biologic use included IL-1, IL-6 and TNF inhibitors. The proportion of patients treated with biologics, primarily anakinra, increased after 2012 (Table 1). W_mean PGA and AJC at the 12±3 month visit were 1.55 and 1.57, respectively (Table 2). At one year, the proportion of patients prescribed GC varied (w_mean 40%, range 26-60%).

Conclusion: Analysis of SJIA patients across 10 countries show that time to first rheumatology visit was highly variable. Although local factors influence treatment decisions, biologic use increased after 2011; anakinra most common. Nearly 75% of patients were prescribed steroids within the first year but seemed to decrease after 1 year. More study is needed on long-term outcomes in SJIA patients within this modern era.

2: Clinical Outcomes at 12 Months -all years

	AJC Median [IQR]	PGA Median [IQR]	GC Use, %
USA	0 [0, 0]	0 [0, 0]	47
Canada	0 [0, 2]	0.1 [0, 2.7]	41
UK	0 [0, 0]	0.5 [0, 1.7]	53
Portugal	0 [0, 0]	0.3 [0, 1]	53
Sweden	0 [0, 0.5]	0 [0, 0.5]	31
Denmark	0 [0, 0]	-	26
Turkey	4 [2, 7]	4 [3, 7]	60
Germany	0 [0, 1]	0 [0, 2]	36
Norway	0 [0, 0]	0.5 [0, 2]	45
Finland	0 [0, 0]	0 [0, 0]	33

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A SYSTEMATIC REVIEW TO INFORM THE EULAR POINTS TO CONSIDER WHEN ANALYSING AND REPORTING COMPARATIVE EFFECTIVENESS RESEARCH WITH OBSERVATIONAL DATA IN RHEUMATOLOGY

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