THU0639 CHINESE EXPERIENCE WITH METHOTREXATE AS MAINTENANCE THERAPY IN IGG4-RELATED DISEASE

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Background: So far, for IgG4-related disease, no randomised clinical trials concerning therapy are published. Corticosteroids are considered the first-line treatment and most patients respond promptly to steroids. However, recurrent or refractory cases are common. Various immunosuppressive agents such as azathioprine (AZA), methotrexate or mycophenolate mofetil (MMF) have been introduced as corticosteroid-sparing treatment on small case series.¹ High cost of MMF and occasional severe bone marrow toxicity of Aza have limited their use in Chinese patients. Efficacious therapies with less toxicity and more cost-effectiveness were required to be identified and thus modify the immunotherapeutic strategies. Methotrexate (MTX) was commonly used in many other autoimmune disease. In the present study, we retrospectively reviewed 84 IgG4-RD patients who received MMF, Aza or MTX as maintenance regimens, compared the efficacy among these three groups and observed side effects of the medication.

Objectives: To assess the efficacy, safety and tolerability of methotrexate as maintenance therapy in the treatment of IgG4-related disease.

Methods: We retrospectively reviewed 84 IgG4-RD patients refractory or recurrent to steroids in south China from January 2012 to December 2015 who received MMF, Aza or MTX as maintenance regimen. MMF was administered daily to a maximum of 3 g/day. Aza was given at a dose maximum of 200 mg/day. MTX was given at a dose of 10–20 mg/week. Steroids were continued at the lowest effective dose. Details of the clinical presentation, serological, immunological variables and side effects were collected.

Results: Of the 84 patients, no significance of demographic variables was found among MMF group (22 cases), Aza group (29 cases), and MTX group (33 cases). The 2 year overall, the three groups had similar rates of remaining remission, which was 87.9% (29/33) in MTX group, 86.2% (25/29) in Aza group and 86.3% (19/22) in MMF group. Of the 11 recurrent cases despite immunosuppressive therapies, 2 cases were related to thyroid gland, 4 cases were related to pancreas, 3 cases were related to nose, and 2 cases were related to brain. All cases but the 2 patients with brain lesions achieved remission again after we changed the immunosuppressives. One case on Aza had severe bone marrow toxicity and 2 cases on MMF had severe infection. None of the cases on MTX had side effects affecting the treatment course. It's only associated with reversible liver dysfunction in our study.

Conclusions: MTX was as efficacious as MMF and Aza in maintaining remission in IgG4-related diseases, but with lower price and less severe side effects. IgG4-related brain lesions may be refractory and probably need to be treated with more aggressive agents.

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THU0640 PHARMACOLOGICAL TREATMENT AMONG NEWLY DIAGNOSED PATIENTS WITH JUVENILE IDIOPATHIC ARTHRITIS IN THE UNITED STATES

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Background: Juvenile idiopathic arthritis (JIA) is a chronic condition affecting approximately 3 000 000 children and adolescents in the United States, yet little is documented about its real-world burden or treatment patterns.¹

Objectives: To describe treatment patterns among JIA patients (pts) who initiated biologic and non-biologic DMARDs.

Methods: Truven Health Analytics MarketScan® Commercial Database was used to identify pts aged 2–17 years with a new JIA diagnosis (index date; 2008–2016) and 12 months of continuous enrolment pre- and post-diagnosis. Pts with other rheumatic or autoimmune conditions were excluded. Receipt of a biologic and/or non-biologic was evaluated on or after the new JIA diagnosis. JIA-related

healthcare resource utilisation was defined as the presence of JIA diagnosis on a medical claim.

Results: A total of 3815 pts newly diagnosed with JIA met study selection criteria (mean [SD] age 10.0 [4.5] years, 69.0% female). Pts with 12 months of continuous enrolment post-treatment initiation (n=2014) were classified as non-biologic only (n=734), biologic only (n=873), and both biologic and non-biologic (n=407) users. Among all three cohorts, baseline corticosteroid use was 48.8%–60.4%, prescription NSAID use 69.6%–85.3% and opioid use 24.5%–29.0%. Mean (SD) number of JIA-related outpatient office visits was 4.9 (3.2) in non-biologic-only users, 6.0 (3.8) in biologic and non-biologic users, and 5.0 (4.4) in biologic-only users. The most commonly used non-biologic was MTX and biologic was etanercept (table 1). In the year following diagnosis, total JIA-related costs were highest among pts who used only biologics (mean \$27,292; SD \$32,833; median \$20,782) vs biologic and non-biologic agents (mean \$15,808; SD \$16,086; median \$11,925) and vs only non-biologics (mean \$4094; SD \$9292; median \$1918) (all p<0.001). Mean prescription costs in the year following biologic initiation were \$17 985 (SD \$11,188) for etanercept, \$26 217 (SD \$15,039) for adalimumab and \$38 260 (SD \$42,260) for infliximab. Of pts treated with a biologic only, TNF inhibitors (TNFi) comprised 87.1% of their treatment costs.

Abstract THU0640 – Table 1. JIA Treatment Frequency

	First agent used	Biologic-only users (n=873)	Biologic and non-biologic users (n=407)	Non-biologic-only users (n=734)	All treated patients (n=2014)
Biologics	Abatacept	15 (1.7)	6 (1.5)		21 (1.0)
	Adalimumab	188 (21.0)	106 (25.7)		294 (14.4)
	Anakinra	43 (4.8)	9 (2.2)		52 (2.5)
	Etanercept	523 (58.4)	259 (62.7)		782 (38.3)
	Infliximab	71 (7.9)	20 (4.8)		91 (4.5)
	Intravenous immunoglobulin	17 (1.9)	1 (0.2)		18 (0.9)
	Tocilizumab	16 (1.8)	6 (1.5)		22 (1.1)
	Hydroxychloroquine		31 (7.5)	149 (20.2)	180 (8.8)
	MTX		341 (82.6)	506 (68.8)	847 (41.4)
	Sulfasalazine		42 (10.2)	75 (10.2)	117 (5.7)
Non-biologics	Other (azathioprine, leflunomide)		5 (1.2)	15 (2.0)	20 (1.0)

Data are n (%)

Conclusions: Initial JIA treatment is driven by etanercept, MTX and adalimumab, with the majority of biologic costs coming from TNFi. Receipt of other supportive medications (corticosteroids and NSAIDs) was common and JIA-related costs varied substantially by treatment cohort.

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THU0641 MUSCULOSKELETAL DISEASE CLINIC MANAGED BY A RHEUMATOLOGY DEPARTMENT

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Background: Medical pathology of the Locomotor Apparatus (LA) is highly prevalent in the general population, tends to chronicity, generates an important temporary or definitive disability with great impact on the quality of life and functionality of the patient and entails high indirect and direct costs for the System National Health Classically, the medical pathology of LA has been managed by Traumatology departments.

Objectives: To analyse the characteristics of an LA clinic managed by the Rheumatology department and compare the data with the Traumatology department in the health area of the north of Tenerife (Reference population: 4 30 021 inhabitants).