THU0587 CLINICAL AND THERAPEUTIC ASPECTS OF A SOUTH ASIAN POPULATION OF SYSTEMIC ONSET JUVENILE IDIOPATHIC ARTHRITIS IN A TERTIARY CARE PEADIATRIC RHEUMATOLOGY CENTREIN SRI LANKA

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Background: Systemic onset juvenile idiopathic arthritis is a rare multisystem inflammatory disease of childhood associated with significant morbidity and mortality. Sri Lanka is a country situated in south Asia. Disease characteristics of systemic onset juvenile idiopathic arthritis is not well studied in this geographical region. Sri Lanka offers public funded free universal healthcare for all citizens including biological disease modifying drugs. Lady Ridgway hospital for children is the national centre for tertiary peadiatric care and draws patients from wider geographical territory of Sri Lanka.
Objectives: To describe the demographic parameters, clinical features, disease activity and therapeutic aspects of systemic onset juvenile idiopathic arthritis among a population of Sri Lankan patients.
Methods: A descriptive cross sectional study was conducted at the department of rheumatology at Lady Ridgway hospital for children. Systemic onset juvenile idiopathic arthritis patients of 1–16 years of age, with minimum 6 months follow up in the study centre were recruited. Patients' demographic, clinical and laboratory data were collected.
Results: Data of 32 patients were analysed. Eleven (34.4%) were males and 21 (65.6%) were females. Mean age was 9.3 years (SD=4.19) while mean age at diagnosis was 5.95 years (SD=3.35). Majority n=17 (55%) had polyarthritis at the onset while n=12 and n=2 showed oligo-arthritis and mono-arthritis respectively. Mean inflammatory joint count at presentation was 5.4 (SD=3.7). Fifteen (46.9%) patients had persistent disease while 11 (34.4%) showed monocyclic and 6 (18.7%) had polycyclic disease pattern. Mean erythrocyte sedimentation rate of the study population at diagnosis was 104 0.2 mm/1st hour, dramatically reduced to 43.9 mm/1st hour after 6 months of treatment. All patients received corticosteroids for variable durations and doses during the disease course. Methotrexate was given to majority of patients (n=25, 78.1%). Thirteen patients (40.6%) received Tocilizumab. Disease remission was achieved by majority of 18 (56.2%) patients. All eligible patients received biological disease modifying drugs when indicated. Mean JDAS 10 score of the population was 4.4.
Conclusions: The above study revealed important demographic data, clinical features and therapeutic aspects of a population of systemic onset juvenile idiopathic arthritis in a tertiary care peadiatric rheumatology centre in a south Asian population in Sri Lanka. Majority of patients were able to achieve remission or low disease activity with treatments.

REFERENCES:

[1] Petty RE, Southwood TR, Manners P, et al. International League of Associations for Rheumatology classification of juvenile idiopathic arthritis: second revision, Edmonton 2001. J Rheumatol 2004;31:390–2.
[2] Modesto C, J. Ant´on B, Rodriguez, et al. Incidence and prevalence of juvenile idiopathic arthritis in Catalonia (Spain): Scandinavian Journal of Rheumatology 2010;39(6):472–479.
[3] Gunatillaka KAN, de Silva MKK. Juvenile idiopathic arthritis: An observational study, Sri Lanka Journal of Child Health 2007;36:96–101.
[4] Consolaro A, Ruperto N, Bazso A, et al. Development and validation of a composite disease activity score for juvenile idiopathic arthritis. Arthritis Rheum 2009; 61:658–6.

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THU0588 REDUCTION IN THE UTILISATION OF PREDNISONE AND/OR METHOTREXATE FOLLOWING THE INITIATION OF ETANERCEPT IN PAEDIATRIC PATIENTS

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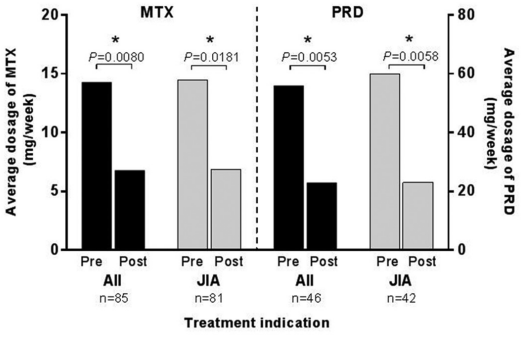
Background: In Canada, the paediatric indications of the soluble TNFα receptor etanercept (ETN) are active ankylosing spondylitis (AS) and moderate to severely active juvenile idiopathic arthritis (JIA; in those who have had an inadequate response to ≥1 disease-modifying anti-rheumatic drugs and are ≥4 years of age). A previous analysis of Canadian claims data for children demonstrated a 78% yearly retention rate over Year 1 for ETN, which remained high over Years 2–6 (80%–90% per year). However, at this time, the changes in co-medication during ETN treatment in paediatric patients have rarely been evaluated in the real-world setting.
Objectives: To evaluate co-treatment utilisation and ETN costs in Canadian paediatric patients initiating ETN therapy.
Methods: A retrospective cohort study was conducted using longitudinal prescription drug claims data from the IQVIA Private Drug Plan (PDP), Ontario Public Drug Plan (OPDP), and Quebec Public Drug Plan database (RAMQ). Biologic-naïve paediatric patients (<18 years, with no biologic treatment in the preceding 12 months) were included if they initiated ETN during the selection period Jan 2008-Jan 2016). Disease indications were inferred through patient drug history. Analyses of ETN doses and co-treatments were conducted in patients<17 years at index and with no missing data or drug histories indicative of conditions other than JIA, AS, or psoriatic arthritis (PSA). Weekly ETN dose was estimated for patients who completed 12 month continuous ETN therapy (7 x [mg dispensed/ days between claims]). Co-treatments were captured for the 6 months preceding and 12 months following index. Drug costs of ETN (manufacturing plus wholesale and pharmacy mark-up) were estimated for all those <18 years who initiated ETN therapy.
Results: The study identified 391 patients<18 years old who initiated ETN and who had not received treatment with a biologic in the preceding 12 months. From this group 330 patients provided data for the evaluation of ETN doses and co-treatments (67% female, 39% aged 10–14 years). The majority were from Quebec (36%) or Ontario (33%), insured on PDP (87%). Drug history was consistent with JIA (96%), PSA (3%), and AS (1%). Among the 316 patients who completed 12 months of continuous ETN therapy, the average weekly ETN dose was 31 mg (range 29–35 mg), but varied with age. Overall, 103 of 330 patients (31%) used methotrexate (MTX) before initiating ETN, with 85/103 (83%) continuing this through the first 12 months of treatment; 28% of patients (n=92) used prednisone (PRD) before initiating ETN, with 46/92 (50%) continuing PRD during the first 12 months of ETN treatment. In patients continuing co-treatment, weekly dosages were significantly reduced (p≤0.008 by paired *t*-test; figure 1). The average yearly cost of ETN among the 330 paediatric patients indexed was $13 671 (Canadian $ per year).



*=P≤0.02 by paired *t*-test
JIA: juvenile idiopathic arthritis; MTX: Methotrexate; PRD: Prednisone

Abstract THU0588 – Figure 1 Average. dose of methotrexate or prednisone pre- and post-initiation of etanercept in paediatric patients with continuing co-treatment

Conclusions: This evaluation of Canadian claims data demonstrated that less than a third of paediatric patients initiating ETN were co-treated with MTX or PRD. Many patients discontinued their co-therapies, and among those who continued therapy with these agents, weekly dosages of MTX or PRD were significantly lower within the first year of initiating treatment with ETN.

REFERENCE:

[1] Khraishi M, et al. Arthritis Rheumatol 2017;69:S10.

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