AB0931

TRANSLATION AND VALIDATION OF THE MTX INTOLERANCE SEVERITY SCORE QUESTIONNAIRE FOR PORTUGUESE VERSION IN BRAZIL IN JUVENILE IDIOPATHIC ARTHRITIS

Ana Carolina Londe, Roberto Marini, Simone Appenzeller. *University of Campinas, Campinas, Brazil*

Background: Methotrexate (MTX) is the first-choice disease-modifying anti-rheumatic drug (DMARD) for the treatment of juvenile idiopathic arthritis (JIA). During therapy, there are frequent reports of discontinuation of MTX, either by physicians or patient's own conduct. Through the MTX Intolerance Severity Score questionnaire (MISS), we determined the prevalence of MTX intolerance.

Objectives: Translate and validate the MTX Intolerance Severity Score questionnaire (MISS) to Portuguese.

Methods: The MISS was translated into Portuguese following the "Guidelines for the process of cross-cultural adaptation of self-report measures". The MISS consists of 4 domains: stomachache, nausea, vomiting, and behavioral complaints. Each domain includes three to four items, and for every item, four answers are possible: no complaints (0), mild complaints (1 point), moderate complaints (2 points), and severe complaints (3 points). The points are summed to give a total score from 0 to 36. Statistically analysis was performed on the SPSS[®], version 21. The psychometric properties were analyzed according to the Consensus based Standards for the Selection of Health Measurement Instruments (COSMIN), analyzing acceptability for each item; internal consistency using Cronbach's alpha coefficient and reproducibility assessed by Kappa. We plot the ROC curve to evaluate the discriminant validity of the MISS compared to gold standard (clinical interview) and cut-off score was determined.

Results: We included 220 subjects, 144 patients with JIA in use for at least 3 months of MTX and 76 parents. The median age of patients were 18.3 SD±8.7 years. Seventy-three (73%) patients were females and the JIA subtype most frequently observed was polyarticular. Routes of administration of MTX were subcutaneous (81%) and oral (19%). All the subjects answered the MISS with less than 5 minutes. The internal consistency of MISS had a Cronbach's alpha = 0.851 (patients) and 0.805 (parents), considered good (≥ 0.8). The reproducibility between the test (40 patients) and the retest done after 15 days (36 patients) was almost perfect (kappa > 0.8). Reliability between patients and parents was almost perfect (kappa > 0.8), except stomachache (anticipatory with kappa = 0.30); considered weak ($\kappa = 0.2 - 0.4$) and stomachache by association ($\kappa = 0.54$); considered moderate ($\kappa = 0.4 - 0.6$). A cut-off scores of 3 showed the best sensitivity (93%) and specificity (71%). Using this cut-off we observed 78 (54.2%) patients intolerant

Conclusion: MISS is a good tool for physicians, because it can not only measure the intolerance, but also explore the different forms in which it manifests. Although MTX has a great therapeutic index, the adverse reactions are still seen as a major form of abandonment of this pharmacological treatment. Therefore a careful history is essential to identify side effects and adequate treatment to increase adherence.

REFERENCES

- [1] Bulatovic M, et al. *Arthritis&Rheumatism*. 2011; 63: 2007-2013.
- [2] Chausset A, et al. *Clin Rheumatol*. 2017; 36:1281-1288.
- [3] Beaton D, et al. *Spine*.2000; 24:3186-3191.
- [4] Terwee C, et al. *J Clin Epidemiol*.2007; 60:34-42.

Disclosure of Interests: None declared

DOI: 10.1136/annrheumdis-2019-eular.6077

AB0932

PREDICTORS OF FLARE FOLLOWING ETANERCEPT WITHDRAWAL IN PATIENTS WITH RHEUMATOID FACTOR NEGATIVE JUVENILE IDIOPATHIC ARTHRITIS DURING 48 MONTHS OF FOLLOW-UP

Angela Aquilani¹, Denise Pires Marafon², Andrea Uva¹, Hanan Jadoun¹, Fabio Basta¹, Rebecca Nicolai¹, Fabrizio De Benedetti¹, Silvia Magni-Manzoni¹. ¹IRCCS Ospedale Pediatrico Bambino Gesù, Division of Rheumatology, Roma, Italy; ²Fondazione IRCCS Ca' Grande Ospedale Maggiore Policlinico, Intermediate Pediatric Care Unit, Milan, Italy

Background: Little is known about the risk of flare after etanercept (ETN) withdrawal in children with Juvenile Idiopathic Arthritis (JIA). Recently we conducted a retrospective chart review of 110 patients with JIA who discontinued ETN due to persistent clinically inactive disease (CID) on medication and were followed up to 12 months after ETN

withdrawal. We showed that 60% of patients flared with arthritis. Male gender, presence of ANA and elevated CRP at baseline were associated with higher risk of flare.

Objectives: To evaluate frequency and timing of flares during 48 months of follow-up after withdrawal of ETN first course in patients with JIA who attained clinical remission on medication and to identify predictors of early flares (<12 months after withdrawal of ETN first course) and predictors of repeated flares (≥ 2).

Methods: The 110 patients enrolled in the previous study with oligo (o-JIA) and RF-negative polyarticular JIA (p-JIA) who received a first course of ETN for at least 18 months and maintained clinically inactive disease (CID) for at least 6 months on treatment, were followed for 48 months after withdrawal of first course of ETN. We excluded patients that switched or swapped to other biologics or with limited follow-up. Demographic and clinical features at onset, at baseline (initiation of ETN) and at time of disease flares were collected.

Results: Among the cohort of the study, 10 patients (9%) were lost to follow-up and 18 (16%) switched/swapped to other biologics during 48 months of follow-up after withdrawal of ETN first course. Of the 82 patients included in the analysis, 55 (67%) were treated with only one course of ETN, while 27 (33%) received more than one course of ETN. The median age at disease onset was 3.6 years (IQR 1.9-8.5) and 72% of patients were female, ANA positive patients had a younger age at onset and were more frequently o-JIA. After withdrawal of ETN first course, 70 of the 82 (85%) patients enrolled flared with arthritis, without evident differences between o-JIA and p-JIA. Disease duration at diagnosis and at ETN start, total number of joints involved and total MTX treatment duration were not associated with flare. Patients who flared were more frequently males ($p=0.017$) and ANA positive ($p=0.026$), presented with higher levels of CRP ($p=0.029$) at baseline and had longer total ETN treatment duration ($p=0.0046$). Higher values of CRP were associated with a higher risk of repeated flares ($p=0.0094$). No predictors of early flares were identified in this group.

When we analysed the 55 patients treated with one course of ETN, 48 (87%) flared during follow-up. Patients who flared were more frequently ANA positive ($p=0.015$), presented higher CRP levels ($p=0.042$) at baseline and concomitant MTX at ETN withdrawal ($p=0.009$). Higher levels of CRP was also associated with higher numbers of repeated flares ($p=0.049$). No predictors of early flares were identified in this subgroup.

Conclusion: Our results show that almost 90% of patients with JIA experience at least one flare after ETN withdrawal during 48 months of follow-up. Our findings confirmed that male gender, positive ANA and elevated CRP at baseline are associated with a higher risk of flare. Higher CRP levels at baseline resulted also associated with a higher risk of repeated flares.

REFERENCES

- [1] Predictors of Flare Following Etanercept Withdrawal in Patients with Rheumatoid Factor-negative Juvenile Idiopathic Arthritis Who Reached Remission while Taking Medication.
- [2] Aquilani A, Marafon DP, Marasco E, Nicolai R, Messina V, Perfetti F, Magni-Manzoni S. *J Rheumatol*. 2018;45:956-961

Disclosure of Interests: Angela Aquilani: None declared, Denise Pires Marafon: None declared, Andrea Uva: None declared, Hanan Jadoun: None declared, Fabio Basta: None declared, Rebecca Nicolai: None declared, Fabrizio De Benedetti Grant/research support from: Abbvie, SOBI, Novimmune, Roche, Novartis, Sanofi, Pfizer, Silvia Magni-Manzoni Consultant for: Abbvie, Speakers bureau: Abbvie

DOI: 10.1136/annrheumdis-2019-eular.5721

AB0933

ANALYSIS OF THE STATE OF IMMUNITY IN PATIENTS WITH JIA IN TREATMENT

Inmaculada Concepcion Aranda-Valera^{1,2}, Ladehesa Pineda Lourdes¹, Font Ugalde Pilar², Fernández de la Puebla Lechuga Elena³, Copete Marín Sara⁴, Eduardo Collantes Estevez^{1,2}, Roldán Molina Rosa¹. ¹Reina Sofia University Hospital, Rheumatology Service, Córdoba, Spain; ²University Of Córdoba (UCO), Medicine, Córdoba, Spain; ³Reina Sofia University Hospital, Pediatric, Córdoba, Spain; ⁴Valle de los Pedroches Regional Hospital, Rheumatology Service, Córdoba, Spain

Background: The correct indication of the suspension of treatment with FAMES and biological therapy in pediatric patients, in the presence of a mild infectious disease or vaccination is a common problem in children's rheumatology. In patients with juvenile idiopathic arthritis (JIA), joint or extra-articular clinical reactivation during these "pauses" is not uncommon,