FRI0352

DIFFERENCES IN ANTISYNTHEASE SYNDROME DEFINITION AND RELATED DIAGNOSTIC PERFORMANCE. A SYSTEMATIC LITERATURE REVIEW INFORMING THE NEW ACR/EULAR CLASSIFICATION CRITERIA

Giovanni Zanframundo¹, Sara Faghihi Kashani², Lorenzo Cavagna¹, Rohit Aggarwal², Carlomaurizio Montecucco¹, Carlo Alberto Scirè³, Garifallia Sakellariou¹. ¹University and IRCCS Policlinico S. Matteo Foundation, Division of Rheumatology, Pavia, Italy; ²University of Pittsburgh School of Medicine, Division of Rheumatology and Clinical Immunology, Department of Medicine, Pittsburgh, United States of America; ³University of Ferrara, Rheumatology Section, Department of Clinical Sciences, Ferrara, Italy

Background: Antisynthetase syndrome (ASSD) lacks of established clinico-serological classification criteria. A taskforce by EULAR and ACR is working on to develop and validate classification criteria for ASSD.

Objectives: To systematically upraise literature to retrieve the available definitions of ASSD and to evaluate their diagnostic performance.

Methods: This systematic review followed a pre-specified protocol. Two research questions (Q1: how is ASSD defined; Q2: what is the diagnostic performance of the definitions) were rephrased into PICO terms to create search strategies. Studies on patients with suspect or confirmed ASSD, including a definition of the disease with any study design, excluding case-reports and narrative reviews, were eligible for inclusion. The diagnostic performance had to be tested against the reference standard of expert opinion. PubMed and Embase were searched from 01/01/1984 to 06/11/2018. Moreover, the ACR and EULAR congress abstracts (2017-2018) were hand searched. The titles and abstracts of the retrieved studies were screened by pairs of reviewers, the full-text of studies fulfilling the inclusion criteria was assessed to confirm eligibility. The references of the included studies were also evaluated in search of additional studies. Data from primary studies were extracted into a pre-specified extraction form and, if possible, 2x2 tables to assess diagnostic performance were completed. Sensitivities, specificities, positive and negative likelihood ratios (LR) were calculated for each study. If the diagnostic performance of a definition or variable was assessed in at least 4 studies, a meta-analysis of diagnostic performance was undertaken. The risk of bias (RoB) was assessed using the most appropriate tool depending on study design.

Results: After the exclusion of duplicates, the searches retrieved 4358 studies, of which 375 suitable for full-text review. Finally, 77 studies were included, along with 1 additional study from hand search and 3 congress abstracts. 72 studies were included in Q1 and 9 in both Q1 and 2. The presence of antisynthetase antibodies (70 studies), mainly anti-Jo1 (57 studies); myositis (51 studies), mainly defined clinically (32 studies); and interstitial lung disease (38 studies) were the variables most frequently used to define ASSD. Other variables, such as arthritis (19 studies), Raynaud's phenomenon and skin manifestations (10 studies each) were included less frequently. Most commonly, ASSD was defined by a combination of clinical and serological variables. However, no study evaluated the diagnostic performance of such combined definitions. Most of the studies included in Q2 (6) evaluated specific variables of muscle biopsy, one evaluated MRI and 2 clinical variables, with a wide variability in the performance of each item. It was possible to meta-analyze data only to assess the performance of perifascicular necrosis/atrophy: pooled sensitivity (95%CI) was 0.53 (0.33,0.72) and specificity 0.63 (0.47,0.76), pooled LR+ 1.45 (0.72,2.89) and LR- 0.73 (0.40,1.34).

Conclusion: ASSD is defined according to a variety of combinations of serological, clinical and histological variables. The performance of these combined definitions however has not been tested, and from the limited evidence available single muscle biopsy variable (perifascicular necrosis/atrophy) seem to perform poorly. The systematic review confirms the need of data and consensus driven classification criteria for ASSD.

Disclosure of Interests: Giovanni Zanframundo: None declared, Sara Faghihi Kashani: None declared, Lorenzo Cavagna: None declared, Rohit Aggarwal: None declared, Carlomaurizio Montecucco: Speakers bureau: AbbVie, Bristol-Myers Squibb, Celgene, Sanofi, Genzyme, Lilly, MSD, Pfizer, UCB, Carlo Alberto Scirè: None declared, Garifallia Sakellariou: None declared

DOI: 10.1136/annrheumdis-2019-eular.5812

FRI0352B

COMPARISON OF TWO ILOPROST REGIMENS IN TERMS OF ECONOMIC IMPACT AND EFFECTIVENESS

Alessandra Della Rossa¹, Simone Barsotti¹, Marco Di Battista¹, Lorenzo Puccetti¹, Valentina Lorenzoni², Giuseppe Turchetti², Marta Mosca¹. ¹Azienda Ospedaliero Universitaria pisana, UO REUMATOLOGIA, Area Medica e Oncologica, Pisa, Italy; ²SSSUP, Pisa, Italy

Background: Systemic sclerosis (SSc) is an autoimmune chronic disease characterized by prominent vascular involvement. Intravenous iloprost (IV ILO), according to the recently updated EULAR recommendations, is indicated for SSc Raynaud's phenomenon (RP) after failure of oral therapy. Moreover, IV ILO could be useful in DU healing and may represent a potential disease modifying medication. However, there are no uniform data regarding type of regimen (dosage, duration and frequency) and infusion modality.

Objectives: The purpose of this study was to compare effectiveness (in terms of DUs) and direct costs, of two regimens of IV ILO infusion in the same cohort of consecutive SSc subjects.

Methods: Protocol A (A): the patient was admitted and 100 mcg of ILO was diluted in 500 ml of normal saline or 5% dextrose solution and infused continually at the maximum tolerated dose until exhaustion.

Protocol B (B): the patient was followed as outpatient at infusion clinic and 50 mcg of ILO was diluted in 250 of normal saline or 5% dextrose and infused at a dose range from 0.5 to 1.5 ng/Kg/min. The dose was escalated at 30 minutes intervals and maintained at the maximum tolerated dose for 5 consecutive hours for two consecutive days. The intervals between the infusions were between 6-8 weeks in both protocols depending on clinical response and availability of places at the Unit.

44 patients who received long term IV ILO as inpatients (Cohort A), after a wash out of 3 months, were switched to ambulatory administration (Cohort B). Thereafter, after one year of follow-up 24 patients of the protocol B were lost to follow-up and 20 patients were maintained on this regimen. Comparison was made between Cohort A (44 patients=A44) in the period between march 2015 and October 2016 (period A), Cohort B (44 patients=B44) between October 2016 and March 2017 (period B44), Cohort B (20 patients=B20), between October 2017 and March 2018 (period B20). Comparison between groups was made by non parametric tests and contingency table analysis when appropriate. Costs were estimated multiplying data related to resource use (drug consumption, hospital stay, outpatient visits, management of complications, etc) by unit cost obtained from the accounting office of the Hospital. All costs were expressed in Euro

Results: Mean number of DUs at the end of period A was 0,37±0,98 in A44 as compared to 0,90±1,39 of period B44 cohort B44 (p=0,045) and 0,55±0,95 of period B20 Cohort B20 (p=n.s.). Cumulative number of DUs was 9/44 in Cohort A (20.5%) as compared to 20/44 in Cohort B44 (45% p=0.002) and 7/20 in cohort B20 (35% p=0.05). High number of drop outs (24/44) in protocol B was due mainly to statistical significant difference in tolerability (adverse events 11% protocol A vs 42% protocol B p < 0,01). Direct costs were higher in protocol A (3132±883 Euros vs 2687±556 Euros) as compared to protocol B, despite the differences were not statistically significant between the two modalities

Conclusion: Protocol A seems to represent a regimen better tolerated and more effective than protocol B. Moreover, protocol B is affected by high rate of drops out due mainly to worse tolerability. Admitting SSc-patients for continuous IV ILO infusion seems to represent a better tolerated and more effective choice than following them as outpatients at infusion clinic, with substantially comparable direct costs in the same SSc cohort.

Disclosure of Interests: Alessandra Della Rossa: None declared, Simone Barsotti: None declared, Marco Di Battista: None declared, Lorenzo Puccetti: None declared, Valentina Lorenzoni: None declared, Giuseppe Turchetti: None declared, Marta Mosca: Paid instructor for: GlaxoSmithKline, Lilly, UCB

DOI: 10.1136/annrheumdis-2019-eular.2999