

AB1092 SATISFACTION AND BELIEF REGARDING TREATMENT WITH INTERSTITIAL LUNG DISEASE AND RHEUMATIC DISEASES IN MULTIDISCIPLINARY OUTPATIENT CLINIC

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Background: Among rheumatic disease-related lung disease, interstitial lung disease (ILD) is the most prevalent and contributing to the mortality and morbidity. Increasing number of recent reports dealing with ILD of rheumatoid arthritis (RA), Sjögren's syndrome (pSS) and systemic sclerosis (SSc), multidisciplinary discussions (MDDs) have been growing interest for diagnostic accuracy with dedicated service. There was little evidence indicating that multidisciplinary outpatient clinic resulted in improvements in clinical outcomes including satisfaction and belief.

Objectives: We have designed validated a scale of evaluating coping strategies about satisfaction and belief in patient of ILD and rheumatic disease with multidisciplinary approach.

Methods: From December 2015 to September 2016, we evaluated 20 patients of rheumatoid disease with ILD and 20 patients of idiopathic pulmonary fibrosis. Patient perceptions of illness, treatment beliefs, and moods were measured via the multiple choice questionnaires presenting brief Illness perception questionnaire, beliefs about medicines questionnaire, and patient health questionnaire 2 for comparing the effectiveness of MDDs and routine ILD management.

Results: In univariate analysis, beliefs in necessity and concerns of medication differed significantly high in multidisciplinary outpatient clinic for people with ILD (intentional or unintentional). When controlling for other factors that may impact medication nonadherence, more belief in necessity of medication and greater positive emotional response to disease were presented in multidisciplinary outpatient clinic for people with ILD (OR 1.51, CI 1.01–1.82).

Conclusions: The MDD including rheumatologist and pulmonologist allows a satisfactory management comparing routine ILD management. It showed better coping improvements about the emotional distress, pain, and beliefs about treatment. Further research to investigate long-term clinical outcomes of multidisciplinary outpatient clinic for people with ILD is required, overlying the enhancement of mutual communication.

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AB1093 BIOSIMILAR INFLIXIMAB IN RHEUMATOLOGY PRACTICE - THE CYPRUS EXPERIENCE

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Background: Infliximab ('Remicade') has been authorized in the EU since 1999. It has a license for use in major rheumatic diseases and inflammatory bowel disease. The biosimilar 'Inflectra' received its license in Europe in September 2013. It was first launched in Central and Eastern Europe, and some smaller Western European markets due to earlier patent expiry. Inflectra was introduced to Cyprus in 2014 and soon after that, every patient with rheumatoid arthritis, ankylosing spondylitis and psoriatic arthritis would receive this agent when a biologic agent was required. At first there was significant concern amongst the medical community regarding efficacy and safety of biosimilars. Careful observation and pharmacovigilance are therefore required to analyse the effectiveness and safety of biosimilar agents since the significant price difference means that they will be used extensively from now on.

Objectives: The aim of this study was to record statistics of use, effectiveness and safety of the first biosimilar 'Inflectra' following its introduction in Cyprus.

Methods: Cypriot rheumatologists completed an online form for every patient who was prescribed 'Inflectra' from the introduction of the biosimilar in 2014, until late 2016. Collected data included patient characteristics, diagnosis, whether the patient remains on the drug or not, reasons for discontinuation, side effects and physician impression of effectiveness.

Results: 160 patients were entered. Male: Female ratio was roughly equal and

90% were taking a biologic for the first time ('biologic naive'). Indications were Rheumatoid arthritis in 40%, Ankylosing spondylitis in 33%, psoriatic arthritis and other spondyloarthropathies in 20% and a few patients were treated for eye disease and other 'off-label' indications. At the time of recording, 25% of patients were on the drug for less than 3 months, 25% 3–6 months, 25% 6–12 months and 25% over a year. Overall 30% of patients had to discontinue and 70% remain on the drug. Of those who discontinued, 65% did so within 6 months of starting. Of all patients treated with Inflectra, 10% stopped due to side effects, 7% had immediate non-effectiveness and 3% had secondary lack of efficacy. 80% of patients experienced no adverse effect. Amongst the 160 patients, recorded adverse events included 8 infections, 8 skin rashes, 9 headaches and 5 severe allergic reactions. Amongst the infections were 2 respiratory, 2 herpes zoster, 1 sinusitis 1 cellulitis, 1 urinary and 1 gastroenteritis. 94% knew they were taking a biosimilar and 80% had no objection. Patient concerns included safety and effectiveness. The treating doctor was 'quite' or 'very' happy with achievement of the therapeutic target in 66% of cases and 'unhappy' in only 15%.

Conclusions: Despite understandable concerns with the introduction of biosimilars, the experience with our first 160 patients was good; numbers remaining on the drug and adverse effects were similar to previous large studies of infliximab. Rheumatologists feel happy the therapeutic target has been met in a significant majority of cases. Continuous observation and pharmacovigilance are required as with the introduction of any new agent.

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AB1094 ASSOCIATION BETWEEN USE OF TRADITIONAL CHINESE MEDICINE AND MEDICATION ADHERENCE AMONG CHINESE-AMERICAN RHEUMATOLOGY PATIENTS

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Background: Chinese-Americans (CA) are a fast-growing US immigrant group with high utilization of Traditional Chinese Medicine (TCM) and worse SLE and RA outcomes than Caucasians (1,2). The effect of TCM use on adherence to prescribed western medications for systemic rheumatic diseases is unknown.

Objectives: To evaluate whether TCM use is associated with adherence to western medicines prescribed for systemic rheumatic diseases among CA patients.

Methods: Patients with systemic rheumatic diseases were recruited from 2 rheumatology clinics that serve a predominantly CA immigrant population. Inclusion criteria were speaking Mandarin or English and having medication(s) prescribed by the rheumatologist. TCM use, adherence, Patient-Reported Outcomes Measurement Information System (PROMIS) domains, and other variables were assessed using validated instruments available in English and Chinese. Adherence was classified as high or medium/low based on the 8-item Morisky Medication Adherence Scale (3). Medication complexity was assessed using the Medication Regimen Complexity Index (MRCI) (4); higher score indicates more complexity.

Results: 177 enrolled, mean age 54 (range 20–97), 62% female, 73% ≤high school education, 75% Medicaid (subsidized insurance), and only 18% spoke English. Diagnoses were RA (43%), SLE (17%), SpA (16%), Sjogren's (8%), gout/CPPD (6%), and other (10%). 49% reported TCM use in the past year, most commonly *tuina* massage (48%), acupuncture (47%), and herbs (39%). 27% reported high adherence. Table 1 shows significant univariate associations with high adherence. In multivariate analysis adjusting for all variables in Table 1, only TCM use (OR 2.6, p=0.027) and higher MRCI (OR 1.1, p=0.019) were associated with high adherence.

Table 1

	High adherence, n=48	Med/Low adherence, n=129	p-value
Age, years (SD)	63 (11)	52 (17)	<0.001
Employed, %	29	48	0.044
≥20 years in US, %	58	39	0.02
Age at immigration, years (SD)	44 (14)	35 (12)	<0.001
RA, %	56	38	0.029
MRCI, mean (SD)	15 (7)	11 (6)	0.001
TCM use, %	63	44	0.03
PROMIS Sleep disturbance, T-score (SD)*	47 (10)	52 (9)	0.005
PROMIS Anxiety, T-score (SD)*	46 (11)	49 (10)	0.04
PROMIS Fatigue, T-score (SD)*	49 (11)	52 (10)	0.03

*Lower score is better.

Conclusions: Among poorly integrated and low socioeconomic status CA rheumatology patients, TCM use was statistically significantly associated with high adherence to western medication, as was higher MRCI. TCM use does not appear to represent an alternate but rather complementary approach to disease management in these patients. Future studies should evaluate whether TCM use is associated with disease activity and outcomes over time.

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AB1095 EARLY DIAGNOSIS AND TREATMENT OF CHRONIC DISEASES: NATIONAL REVIEW AND GUIDELINES - RA AS AN EXAMPLE

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Background: Managing the increasing burden of chronic diseases is a major public health problem. Are early diagnosis and management a key point for their optimal care and outcome?

Objectives: Assessing early diagnosis and management of chronic diseases was the aim of a study carried out by the High Council for Public Health (HCSP), independent national body gathering experts nominated by the Minister of Health, to provide health authorities with expertise on development of national public health goals, assess their achievement and contribute to their monitoring

Methods: A multidisciplinary working party run within the HCSP a review of scientific data supporting early intervention benefits, as well as frequency, impact and mechanisms of delayed management on individuals and society, in order to produce national guidelines. A huge amount of data were analyzed: argued contributions from national Professional organizations and Patient associations, literature analysis, audition of national agencies representatives.

Results: Early stages of chronic diseases are less studied than later ones. Nevertheless, there is a strong evidence that delayed diagnosis and management are frequent and often adversely affect patients and society. The frequency, length and burden of delayed care were analyzed, varying with each disease, availability of efficient treatments and guidelines, socio-economic context. Optimal time for adequate management from symptom onset was reviewed, as well as medico-economic studies

Rheumatologic disorders appeared as models, notably Rheumatoid Arthritis (well-established window of opportunity, international guidelines for early diagnosis and management, including T2T and patient active implication). Evidence for early treatment benefit was also found for spondyloarthritis, osteoporosis, obstructive sleep apnea syndrome, chronic obstructive pulmonary disease, renal insufficiency, autism spectrum disorders, bipolar disorders, ... Ethical considerations may arise; in Alzheimer's disease, a diagnosis source of marked anxiety, there is no effective pharmacological treatment- but non pharmacological treatments are quite helpful for patients and family and therefore recommended by health authorities.

Obviously, the benefit of early intervention must be strongly assessed. When this benefit is proven, too many patients are facing delays, often long, with adverse consequences and increased burden for society. The mechanisms of such delayed management are multiple and often intricate; we analyzed the barriers to optimal care linked with professionals, patients, family, health system and society, in order to identify the ways to optimize the outcomes and therefore improve the global health status of the population.

Finally the HCSP established a set of guidelines, in 3 axis

- disseminate widely the available knowledge among professionals, patients, the general public, taking into account the social poor perception of chronic diseases
- implement effectively change in practice toward early treatment, when appropriate: timely coordination between professionals and patient, fair diagnosis announcement, early patient implication, fight against social health inequalities
- develop research on early stages of chronic diseases, diagnosis, management and outcomes.

Conclusions: From a national public health perspective, early diagnosis and management, in the chronic diseases where their benefit is proven, should be better known and effectively implemented.

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AB1096 TIMED UP AND GO TEST (TUG) FOR SARCOPENIA SCREENING

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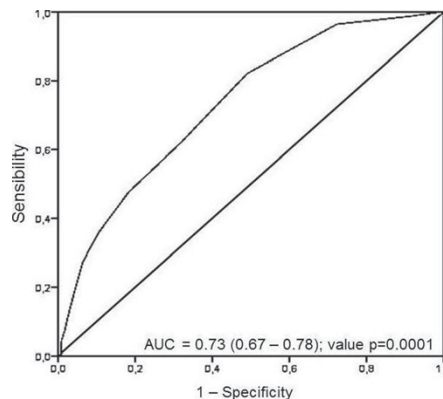
Background: Sarcopenia is a multifactorial syndrome characterized by a decrease of muscle mass and force together with functional performance impairment. Sarcopenia has been described as an independent predictor factor of health adverse outcomes such as falls, decreased quality of life, enhanced risk of death and higher treatment costs. However, there are just a few screening tools of low cost and easy applicability to detect sarcopenia. In this context, a standard

mobility assessment such as the TUG test has recently been described as a predictor of sarcopenia.

Objectives: To evaluate the performance of *timed up and go test* (TUG) as a screening toll for sarcopenia in the elderly.

Methods: This is a cross-sectional home study with 211 elderly participants of the South Region of Brazil. Sarcopenia diagnosis criteria was based on the European Working Group on Sarcopenia in Older People (EWGSOP). Individuals that presented low muscle mass (women: $\leq 6.37\text{kg/m}^2$ and men: $\leq 8.90\text{kg/m}^2$) added to decreased handgrip strength (women: $< 20\text{kgf}$ and men: $< 30\text{kgf}$) and/or walking speed ($\leq 0.8\text{m/s}$) were considered sarcopenic. TUG test quantifies functional mobility through the task of getting up from a chair, walking 3m and come back to sit on the chair.

Results: Based on EWGSOP criteria for sarcopenia, 17.1% (n=36) received the sarcopenia diagnosis. A ROC curve was constructed to evaluate the discriminatory power of TUG (AUC: 0.73 [IC 0.67 – 0.78; p=0.0001]). TUG test presented high sensibility (88.9%) and negative predictive values (93.2%), with a cutoff point of 7.5 seconds (figure 1).



Conclusions: Detecting the beginning of sarcopenia could allow for early interventions and slow the syndrome process, preventing further hospitalizations and economic burden. In this context, TUG is an easy, fast and low-cost test with high sensibility for sarcopenia detection that could be used as screening toll for this syndrome.

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AB1097 PATIENTS' EXPERIENCES OF REMOTE MONITORING OF RHEUMATOID ARTHRITIS USING A SMARTPHONE APP

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Background: The care of patients with Rheumatoid Arthritis (RA) is guided by monitoring changes in disease activity. However, whilst a number of patient-related outcome measures (PROMS) exist¹, they are not collected on an on-going basis. Consequently, there are few objective measurements of disease activity, between clinic visits, to inform treatment decisions. In response to this, the REMORA study (REmote MONitoring of Rheumatoid Arthritis) is developing a smartphone app, to capture data on disease activity and integrate it directly into the electronic patient record. The project explores whether on-going collection of electronic patient-reported outcomes (ePROS) between clinic visits can enhance clinical care, support patient self-management, and provide a sustainable source of data for research.

Objectives: To describe patients' experiences of remote monitoring of their disease activity, and the perceived value in relation to clinical consultations and self-management.

Methods: A diverse sample of 20 patients with RA entered data into the app over