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AB1306

PILOT STUDY OF ADHERENCE IN PATIENTS WITH RHEUMATOLOGICAL DISEASES AUTOIMMUNE

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Background: Data on adherence in patients with autoimmune rheumatological diseases are limited.

Objectives: To analyze the adherence to treatment in patients with autoimmune rheumatological diseases.

Methods: A cross-sectional study was performed in patients from the Complexo Hospitalario Universitario de Pontevedra with diagnosis of systemic lupus erythematosus (SLE), Sjögren's Syndrome (SS) and Systemic Sclerosis (SE).

The patients filled an anonymous survey that included data about demographic, diagnosis and treatment. Adherence to treatment was assessed using the Spanish Compliance Questionnaire in Rheumatology (sCQR). [1] Likewise, a linear regression analysis was carried out in order to identify factors related to adherence to treatment. A significant value was considered as $p < 0.05$. Stata version 11.1 (Stata/IC 11.1 for Windows, Stata-Corp LP, College Station, TX) was used to perform all analyzes.

Results: A total of 44 patients participated in the study, although 90.9% of the surveys carried out could be used for the analysis. A total of 25 (62.5%) SLE, 9 (22.5%) SS and 6 (15.0%) SE patients participated. There were 82.5% of women and the mean age was 48.9 ± 12.8 (See Table 1). According to the sCQR 82.5% were compliant patients. None of the studied variables was associated with the adherence rate: sex ($p = 1.000$), age (0.134), time of evolution ($p = 1.000$), level of education ($p = 0.677$), marital status (0.392), illness ($p = 1.000$), number of drugs ingested per day ($p = 0.873$), treatment with steroids ($p = 0.679$) or anti-malarials ($p = 1.000$).

Conclusion: The adherence rate in our cohort was 82.5% higher than previously reported in other studies. [2,3] The sCQR could be a useful and easy-to-apply tool for the study of adherence in these patients.

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Table 1. Clinical and sociodemographic characteristics of the patients

	N=40		N=40
Age (years), mean, n (%)	48.9 ±12.8	Evolution, n (%)	
Sex (women), n (%)	40 (82.5)	• < 1 year	2 (5.0)
Marital status, n (%)		• 1-2 years	3 (7.5)
• Single	14 (35.0)	• 2-5 years	8 (20.0)
• Married	25 (62.0)	• > 5 years	27 (67.5)
• Widows/Widower	1 (2.5)	• Number of drugs ingested per day, n (%)	
Education, n (%)		• 1	9 (22.5)
• None	3 (7.5)	• 2	5 (12.5)
• Primary	13 (32.5)	• 3	11 (27.5)
• Secondary	10 (25.0)	• 4	4 (10.0)
• Superior/University	1 (2.5)	• 5	2 (5.0)
Occupation, n (%)		• >5	9 (22.5)
• Student	1 (2.5)	Treatments, n (%)	
• Unemployed	2 (10.0)	• Antimalarial	21 (52.5)
• Active	20 (50.0)	• Steroids	14 (35.0)
• Job loss	1 (2.5)	• Methotrexate	5 (12.5)
• Retirement	8 (20.0)	• Azathioprine	1 (2.5)

Diagnosis, n (%)	Rituximab	1 (2.5)
• SLE	25 (62.5)	
• SS	9 (22.5)	
• SE	6 (15.0)	

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AB1307

STUDY OF CONCORDANCE AND EQUIVALENCE AMONG BARTHEL, LAWTON, HAQ AND BASFI QUESTIONNAIRES IN RHEUMATOID AND SPONDYLOARTHRITIS PATIENTS

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Background: Assessment of functional capacity of patients is usually performed using disease-specific questionnaires for rheumatoid arthritis (HAQ) and for axial spondyloarthropathies (BASFI). However, frequently non disease-specific, general indexes such as Barthel and Lawton-Brody (LB) are used to establish disability in legal environments and in emergency rooms. Few studies have compared specific vs. generic questionnaires in rheumatic patients (1).

Objectives: To assess the equivalence between disability questionnaires of generic type, applicable to general population and various diseases (Barthel and LB), with specific questionnaires for rheumatic diseases (HAQ and BASFI).

Methods: A cross-sectional study was conducted in consecutive outpatients with inflammatory rheumatic diseases (rheumatoid arthritis, psoriatic arthritis, spondyloarthropathies) in usual daily clinical practice in a rheumatology clinic of a tertiary hospital.

The patients self-completed the questionnaires (Barthel, LB, HAQ, and BASFI) in a single session. HAQ was only filled by peripheral arthritis patients, while BASFI was only given to spondyloarthropathy subjects. Scores were also computed for SDAI, DAS28 and BASDAI in most patients. Intraclass correlation was used to measure concordance between questionnaires.

Results: A total of 214 patients were studied. There was good correlation between the scores of the indexes studied, especially between the two general questionnaires ($R = 0.45$ $p < 0.01$). We observed a high ceiling effect in the scores of both Barthel, (70% of patients obtained values > 95 over a maximum of 100) and Lawton-Brody (60% had values > 23 over a maximum of 24) tests. The disease-specific questionnaires showed a less skewed distribution. The agreement between Barthel's and Lawton's tests was significant when measured by the intraclass correlation ($R = 0.48$ $p < 0.01$). However, we could not find any significant correlation between the generic questionnaires and the HAQ questionnaire or the BASFI ($R < 0.3$).

Conclusion: The Barthel and Lawton-Brody indices show an important ceiling effect in rheumatic patients, and seem to evaluate dimensions of health other than rheumatic questionnaires such as HAQ and BASFI, and thus they are not interchangeable. This point must be taken into account when performing medicolegal or emergency room assessments. Our result is in line with other previous studies(1)

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AB1308

FAILURE TO BIOLOGICAL THERAPY: WHEN TO EXPECT IT?

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Background: Using Biologic agents, has considerably improved the treatment of inflammatory diseases. But it is associated to the capacity of inducing an immune response in patients that could result in unwanted adverse events or treatment failure.

Objectives: The aim of this work was to compare the clinical and biological response to biotherapy with the presence of ADA and the residual dose rate.

Methods: We analysed the medical records of 69 patients treated with biotherapy between September 2017 and October 2018. 3 pathologies were considered: rheumatoid Arthritis (RA) diagnosed by ACR/EULAR 2009 criteria, Spondylarthritis (SPA) according to Assessment of Spondylarthritis international Society (ASAS) And crohn's disease (CD) classified upon the 2006' Montreal classification. We did search the presence of anti-body anti-drugs (ADA) and the residual dose for the following therapies: Etanercept (ETN), Infliximab (IFX), Adalimumab (Ada) or Rituximab (RTX).

Results: The mean age was 43.33 ± 11.4 year. The sex ratio M/F was 1.57.

Regarding the RA: they were 13 patients. 10 had positive (ACPA) and seven positive (RF). All the patients had an initial treatment by conventional synthetic disease modifying antirheumatic drugs (csDMARDs) before moving to bDMARDs. 14 were in concomitant disease modifying therapy. The DAS28-ESR average was at 4.12 [2.67 à 5.79]. we found positive ADA in only one patient analysis. There were 8 responding versus five non-responding patients, according to the clinical and biological evaluation of disease activity.

28 patients were in the SPA group: 13 with an axial spondylarthritis. 14% had the HLAB 27. It was an active disease in 15 cases. ASDAS-CRP average was 4.87 ± 0.17 [4.7; 5]. The received biotherapy was IFX 50%, ETN 28.6% and Ada 21.4%. 10 patients had a positive ADA and 8 of them had a rate superior to 100 UI. 19 patients were considered as non-Responding.

In the CD group, 28 patients were enrolled. All of them had a previous immunosuppressor treatment. Same patients in association with biotherapy. It was positive ADA in 7 cases. And 7 patients were non-responding to the treatment.

The residual dose of drugs was calculated for each drug and it is explained in the following table :

	IFX		Ada		ETN		RTX	
	%	N	%	n	%	n	%	n
High Residual dose	60%	21	52.9%	9	90.9%	10	66.7%	4
Low residual dose	40%	14	47.1%	8	9.1%	1	33.3%	2

Positive ADA was associated with therapy failure in all type of biotherapy ($p=0.001$). A low residual dose was associated to therapy failure only in the case of IFX ($p=0.005$).

In multivariate analyses, the predictive factors associated with therapeutic failure were : positive ADA ($p=0.008$) and advanced age at diagnosis, below 30 years old age ($p=0.020$). Hosmer index=0.452.

Conclusion: Immune response induced in patients treated with biotherapy can be quantified now thanks to ADA dosage and the residual dose assessment.

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AB1309

QUANTIFICATION OF MINIMAL RESIDUAL DOSE ASSOCIATED WITH BIOLOGICAL THERAPEUTIC RESPONSE ANTI DRUG ANTI BODIES: ARE THEY ALL NEUTRALIZING?

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Background: The use of biological was associated to the capacity of inducing an immune response in patients that could neutralize the drug.

The anti-body anti-drug (ADA) assay was a revolutionary tool to prevent treatment failure.

Objectives: The aim of this work was to assess if the presence of ADA in patients system is sufficient to predict failure and indicates the switch of treatment.

Methods: We enrolled 69 patients treated with biotherapy between September 2017 and October 2018. 3 pathologies were considered: rheumatoid Arthritis (RA) diagnosed by ACR/EULAR 2009 criteria, Spondylarthritis (SPA) according to Assessment of Spondylarthritis international Society (ASAS) And crohn's disease (CD) classified upon the 2006' Montreal classification. We did search the presence of anti-body antidrugs (ADA) and the residual dose for the following therapies: Etanercept (ETN), Infliximab (IFX), Adalimumab (Ada) or Rituximab (RTX).

Results: The mean age was 43.33 ± 11.4 year. The sex ratio M/F was 1.57. there were 13 patients with RA, 28 SPA and 28 CD. The Majority of patients were receiving IFX 50.7% (n=35) with same doses. There were 20 responding versus 15 non-responding patients. 40% of them had a high residual dose. Regarding Ada 24.6% (n=17). There were 9 non-responding patients and low residual doses were found in 47.1%. 11 patients were using ETN. The ADA was positive in only one patient who was non-responding and having a low residual dose.

Concerning the RTX, it was used for 6 patients. The ADA was negative in all patients. Two non-responding cases having a low residual dose.

The following table explains the repartition of patients according to ADA rates:

		ADA Positifs	ADA Négatifs
IFX	Responding patients	4	16
	Non-responding patients	9	6
ETN	Responding patients	0	6
	Non-responding patients	1	4
Ada	Responding patients	0	8
	Non-responding patients	4	5
RTX	Responding patients	0	4
	Non-responding patients	0	2

Positive ADA was associated with therapy failure in all type of biotherapy ($p=0.001$). A low residual dose was associated to therapy failure only in the case of IFX ($p=0.005$).

Positive ADA was associated to a low rate of residual dose in the case of IFX and Ada.

This association couldn't be evaluated for RTX (none) and ETN (just one positive rate).

Conclusion: The ADA assay is a revolutionary tool allowing the evaluation of treatment response but it cannot be considered without the clinical assessment of patient. The evaluation residual dose should be concomitant to valorize and guide the therapeutic decision

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AB1310

PROSPECTIVE USE OF THE GLUCOCORTICOID TOXICITY INDEX (GTI) IN A COHORT OF VASCULITIS PATIENTS

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Background: The Charité Rh-GIOP is a prospective study of disease- & bone-related data from patients with chronic inflammatory diseases treated with glucocorticoids (GCs). The Glucocorticoid Toxicity Index app (GTI 2.0) measures changes in GC-associated morbidity. The GTI captures