



ADHERENCE TO GRAPPA 2015 TREATMENT RECOMMENDATIONS ACCORDING TO THE PRESENCE OF COMORBIDITIES IN PATIENTS WITH PSORIATIC ARTHRITIS

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INTRODUCTION

Comorbidities are common in patients with psoriatic arthritis (PsA). The GRAPPA (Group for Research and Assessment of Psoriasis and Psoriatic Arthritis) guidelines strengthen the choice of treatments according to them.

OBJECTIVES

- To assess adherence to GRAPPA 2015 treatment recommendations according to the presence of comorbidities.
- To describe the prevalence of comorbidities in patients with PsA according to RDCI¹.
- To analyze the influence of comorbidities on disease activity, functional capacity and quality of life.

METHODS

- Cross-sectional study.
- Patients ≥18 years old, with PsA (CASPAR criteria) from the RAPSODIA (Registro de Artritis Psoriásica del IREP Argentina) cohort.
- Study variables:
- Characteristics of the disease: pain and patient global assessment (NVS), joint count (66/68), enthesitis (MASES), skin involvement (PASI), nail involvement (PNSS).
 - Laboratory: ESR (mm/h) y CRP (mg/dl).
 - Composite indexes: DAPSA y DAPSA-ESR, MDA.
 - Questionnaires: HAQ-A, PsAQoL, DLQI.
 - Current treatment.
 - Comorbidities according to RDCI, BMI.
 - Adherence to treatment recommendations in relation to comorbidities established by the GRAPPA 2015 guidelines².

Statistical analysis: Descriptive statistics. Chi² or Fischer, Student T or Mann Whitney and ANOVA or Kruskal Wallis tests. Multiple linear regression models.

RDCI calculation: (2 x lung disease) + cerebral-cardiovascular disease [2 x (myocardial infarction, other cardiovascular disease or strokes) o 1 x (hypertension)] + fracture spine, hip or leg + depression + diabetes mellitus + malignancy + digestive (ulcer or stomach disease).
Range 0-9

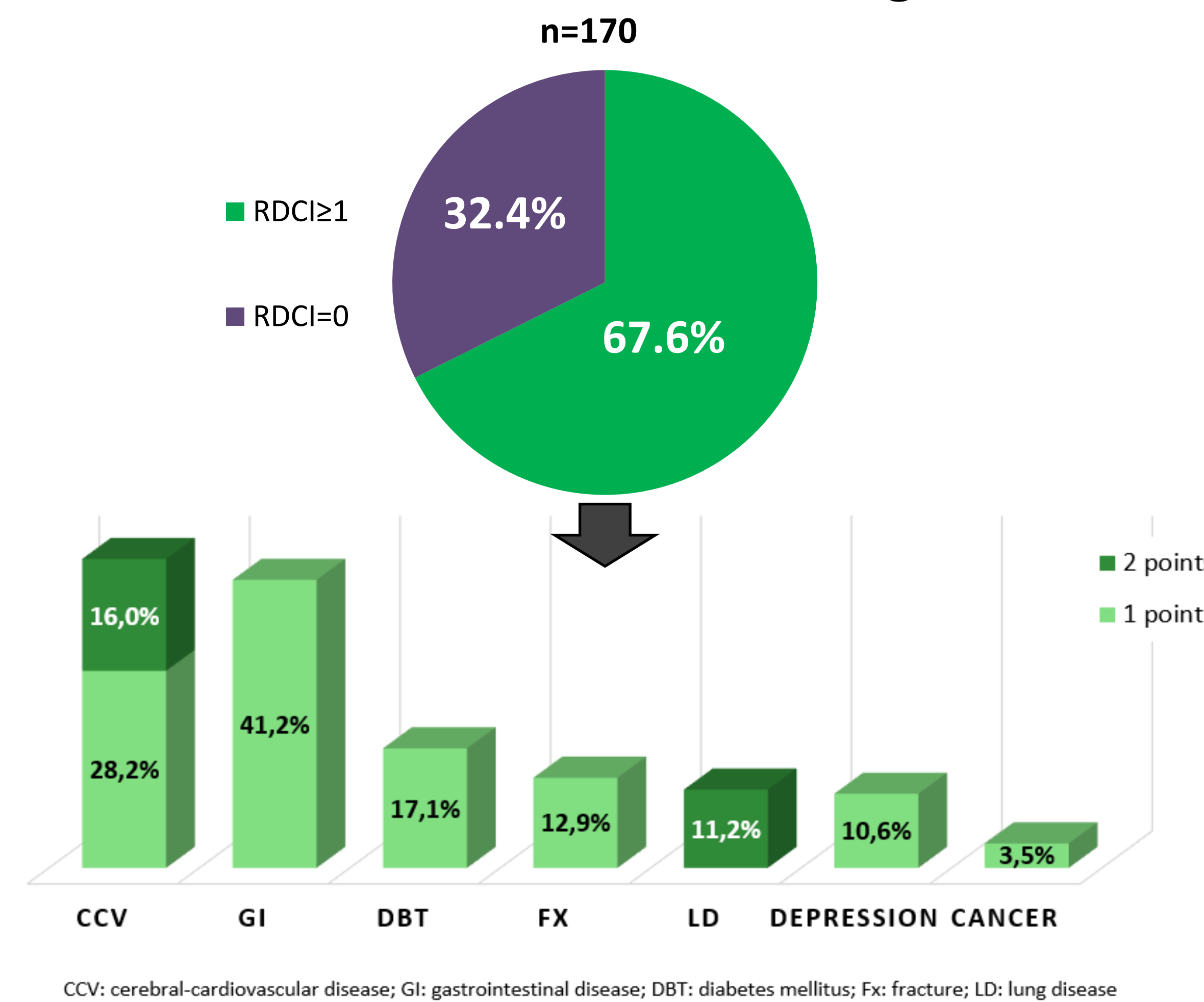
¹ RDCI: Rheumatic Disease Comorbidity Index; NVS: Visual Numerical Scale; MASES: Maastricht Ankylosing Spondylitis Enthesis Score; PASI: Psoriasis Area Severity Index; PNSS: Psoriasis Nail Severity Score; DAPSA: Disease Activity in Psoriatic Arthritis; ESR: erythrocyte sedimentation rate; CRP: C reactive protein; MDA: Minimal Disease Activity; HAQ-A: Health Assessment Questionnaire-argentine version; PsAQoL: Psoriatic Arthritis Quality of Life; DLQI: Dermatology Life Quality Index; BMI: Body mass index; m: median; IQR: interquartile range; cs-DMARDs: conventional synthetic disease modifying antirheumatic drugs; b-DMARDs: biologic disease modifying anti-rheumatic drugs; NSAIDs: non-steroidal anti-inflammatory drugs.

RESULTS

Characteristics of patients

Variables	n=170	Variables	n=170
Age (year) m (IQR)	56 (45-65)	HAQ-A m (IQR)	0.8 (0.1-1.2)
Female gender n (%)	85 (50)	Swollen joint count m (IQR)	0 (0-2)
PsA disease duration (years) m (IQR)	9.9 (4-17)	Tender joint count m (IQR)	1 (0-3)
Peripheral involvement n (%)	146 (85.9)	ESR (mm/h) m (IQR)	19.5 (10-34.3)
Peripheral and axial involvement n (%)	24 (14.1)	CRP (mg/dl) m (IQR)	0.5 (1-1.0)
BMI m (IQR)	28.6 (24.4-32)	MDA n (%)	58 (34.1)
DAPSA-ERS m (IQR)	14.1 (8-22.2)	PNSS m (IQR)	7.5 (2-14)
DAPSA m (IQR)	12.3 (7-19.5)	PsAQoL m (IQR)	6 (0-12.5)
MASES m (IQR)	0 (0-3)	DLQI m (IQR)	2 (0-6)
Pain (NVS) (cm) m (IQR)	5 (2.9-7)	PASI m (IQR)	1 (0-5.7)
Patient global assessment (NVS) (cm) m (IQR)	5 (2-7)	cs-DMARDs n (%)	105 (61.8)
		b-DMARDs n (%)	45 (26.5)

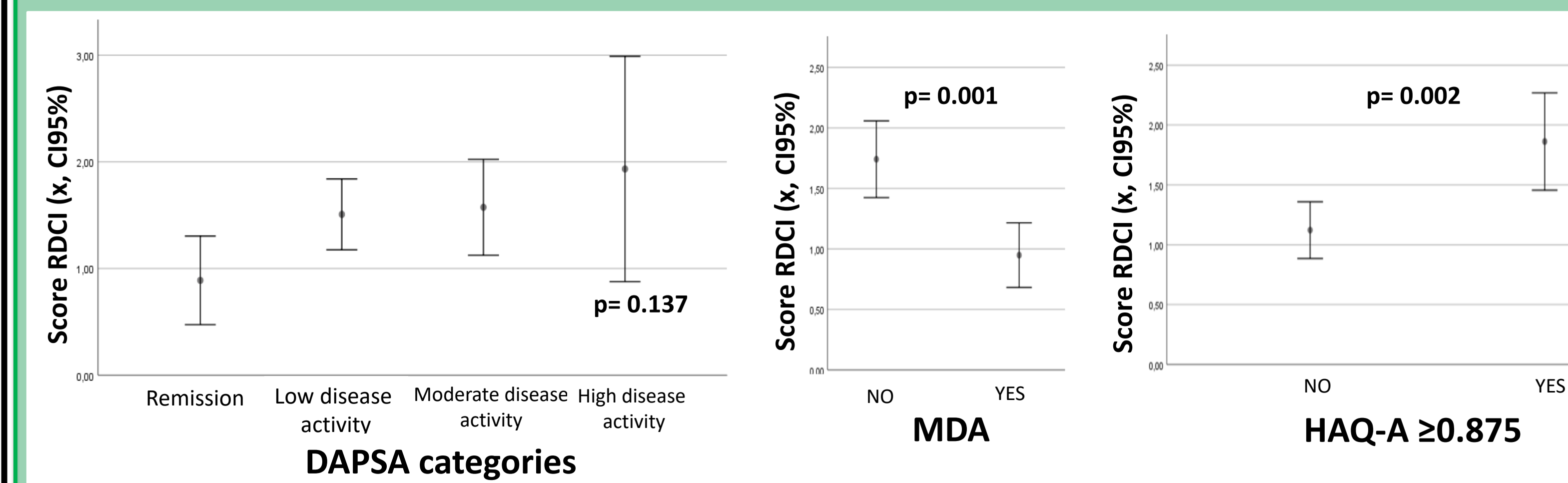
Prevalence of comorbidities according to the RDCI



Association between the presence of comorbidities (RDCI ≥ 1) and sociodemographic and clinical variables

Variables	RDCI=0 n=115	RDCI≥1 n=55	p	RDCI X ± SD	p
Age (years)	48.2 (13.2)	57.5 (12.7)	0.001	1.5 (1.6)	0.220
BMI	27.4 (5.3)	29.9 (5.1)	0.005	1.4 (1.4)	
ESR (mm/h)	26.2 (20.1)	23.8 (18.1)	0.437	1.6 (1.6)	0.010
CRP (mg/dl)	0.8 (1.1)	0.9 (1.1)	0.967	0.9 (1.1)	
Pain (NVS) (cm)	4.5 (3.1)	5.2 (2.9)	0.144	1.8 (1.7)	0.005
Patient global assessment (NVS) (cm)	4.3 (3)	4.2 (2.9)	0.559	1.1 (1.8)	
MASES	1.4 (2.4)	1.9 (2.8)	0.266	1.8 (1.1)	0.475
DAPSA-ESR	15 (10.5)	16.7 (11.7)	0.356	1.4 (1.5)	
DAPSA	13.2 (10)	15.2 (11.4)	0.276	1.5 (1.6)	0.871
PASI	4.4 (8.9)	5 (9.4)	0.933	1.5 (1.5)	
PsAQoL	5.2 (6)	7.6 (7.6)	0.025	1.6 (1.8)	0.587
DLQI	2.3 (3.3)	4.8 (6.6)	0.010	1.4 (1.5)	
HAQ-A	0.7 (0.7)	0.9 (0.7)	0.106	0.9 (1)	0.001
				1.7 (1)	

Association between RDCI values, disease activity and functional capacity



Association between RDCI values and sociodemographic and clinical variables of PsA

- Multiple linear and logistic regression models -

Variables	Coef B	95%CI		p	Variables	OR	95%CI		p
		Inferior	Superior				Inferior	Superior	
Age	0.06	1.03	1.09	<0.001	Age	1.06	1.03	1.09	<0.001
Female gender	1.42	0.68	2.93	0.349	Female gender	1.42	0.68	2.93	0.349
BMI ≥ 25	-0.73	0.21	1.10	0.082	PsA disease duration	1.00	0.96	1.05	0.913
PsAQoL	0.06	0.99	1.13	0.116	BMI ≥ 25	2.03	0.21	1.10	0.091
MDA	0.26	0.55	3.07	0.549	PsAQoL	1.06	0.99	1.13	0.125
Use of NSAIDs	-0.73	0.23	1.00	0.050	MDA	0.72	0.30	1.73	0.459
					Use of NSAIDs	2.10	1.01	4.37	0.048

Dependent variable: RDCI

Dependent variable: RDCI ≥ 1

Drugs indication according to the presence of comorbidities (GRAPPA 2015 guidelines)

Treatment	Heart failure n= 10 #	Ischemic heart disease n= 17	Hepatic steatosis n= 19	Diabetes Mellitus n= 29	Renal insufficiency n= 2	Cancer n= 6	Osteoporosis n= 2*
NSAIDs n (%)	7 (70)	11 (64.7)	9 (47.4)	-	1 (50)	-	-
Corticosteroids n (%)	2 (20)	5 (29.4)	-	8 (27.6)	-	-	1 (50)
TNF-α inhibitors n (%)	0 (0)	-	-	-	-	1 (16.7)	-
Methotrexate n (%)	-	-	11 (57.9)	16 (55.2)	1 (50)	-	-
Leflunomide n (%)	-	-	1 (5.8)	-	-	-	-

Functional class III-IV; *Bone densitometry in last visit (n=6)

Limitations: Cross-sectional study from a single center. The results of physician adherence to the GRAPPA recommendations can not be generalized.

CONCLUSIONS

- Most patients with PsA presented at least one comorbidity and it was mainly associated with age.
- The greater the number of comorbidities, the lower the probability of achieving MDA and the greater the consumption of NSAIDs.
- GRAPPA recommendations were not followed in a considerable number of patients.

¹ England BR, et al. Validation of the rheumatic disease comorbidity index. Arthritis Care Res. 2015;67(6):865-72.
² Coates LC, et al. Group for Research and Assessment of Psoriasis and Psoriatic Arthritis 2015 Treatment Recommendations for Psoriatic Arthritis. Arthritis Rheum. 2016;68(5):1066-71.