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FRI0546

GENDER DIFFERENCES OF RHEUMATIC DISEASES IN MEXICAN POPULATION: DATA FROM THE MEXICAN BIOLOGICS REGISTRY

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Background: Most autoimmune diseases are more prevalent in women. Symptom severity, disease progression, response to therapy and overall survival differ between males and females with rheumatic diseases.

Objectives: To identify the characteristics of autoimmune diseases presentation and treatment between male and female population using information from the Mexican Adverse Events Registry (BIOBADAMEX).

Methods: BIOBADAMEX is a Mexican ongoing cohort that collects the information of patients using biologic and biosimilar drugs since 2016. For this study we included all patients enrolled in the registry and compared baseline clinical and disease characteristics, treatment and presence of adverse events between genders. We used logistic regression to analyze univariable associations.

Table 1. Baseline characteristics in the cohort by sex

	Women n=532 (82%)	Men n=123 (18%)	Univariable ^a OR(95%CI)
Age, median (IQR)	53 (44-60)	47 (34-55)	1.02 (1.0-1.1)*
Body Mass Index, median (IQR)	27 (23-31)	26 (23-30)	1.0 (0.9-1.1)
Smoking, n(%)	28 (5)	18 (16)	0.3 (0.2-0.6)*
Disease duration, median (IQR)	9 (4-16)	7 (2-13)	1.0 (1.0-1.1)*
Diagnosis, n(%)			
RA	414 (78)	37 (30)	2.4 (1.0-5.7)*
ALJ	12 (2)	5 (4)	0.5 (0.1-1.9)
AS	37 (7)	56 (46)	0.1 (0.1-0.4)*
PsA	19 (4)	15 (12)	0.3 (0.1-0.8)*
SLE	17 (3)	3 (2)	1.2 (0.3-5.2)
Others	33 (6)	7 (6)	1
Disease Activity indexes, median (IQR)			
DAS28 ^a	4.9 (3.6-5.9)	4.9 (3.0-5.9)	1.1 (0.9-1.3)
BASDAI ^b	4.8 (2.9-8)	5.3 (2.8-7.5)	0.9 (0.8-1.1)
ASDAS ^c	3.2 (1.9-4.5)	3.9 (2.5-4.7)	0.8 (0.6-1.2)
SLEDAI ^d	14.5 (5.0-19.5)	25 (25.0-31.0)	0.6 (0.4-1.1)
High blood pressure, n(%)	77 (15)	14 (12)	1.3 (0.7-2.4)
Diabetes mellitus, n(%)	46 (9)	7 (6)	1.5 (0.7-3.5)
High cholesterol, n(%)	41 (8)	8 (7)	1.2 (0.4-2.6)
Other comorbidities, n(%)	173 (33)	26 (21)	1.8 (1.1-2.8)*
Use of previous biologic, n(%)	216 (40)	44 (36)	1.2 (0.8-1.8)
Use of steroids, n(%)	215 (42)	34 (29)	1.7 (1.1-2.7)*
Use of DMARD, n(%)	418 (79)	89 (72)	1.4 (0.9-2.2)
Adverse events ^b , n(%)	69 (13)	14 (11)	1.2 (0.7-2.1)
Severe ^b , n(%)	12 (17)	3 (21)	0.8 (0.2-3.1)

Univariable logistic regression analysis. *p<0.05. ^an=469, ^bn=99, ^cn=71, ^dn=19.

Results: A total of 655 participants were analysed, of which 82% were female (Table 1). We found women were older with a median of 53 years compared to 46 years in men (OR 1.02, CI 1.0-1.1). Smoking was higher in men (16%) compared to women (5%), (OR 0.3, CI 0.2-0.6). Women had longer disease duration, 9 years compared to 7 years in men (OR 1.1, CI 1.0-1.1). Rheumatoid arthritis (RA) was more prevalent in women (OR 2.7, CI 1.6-9), while ankylosing spondylitis (AS) and psoriatic arthritis (PsA) were more prevalent in men (OR 0.2, CI 0.1-0.4, and OR 0.3, CI 0.1-0.9 respectively). Women had more comorbidities than men (OR 1.8, CI 1.1-2.8) and used steroids more frequently (OR 1.7, CI 1.1-2.7). Differences in disease activity were not found, however we noticed high activity scores among participants.

Conclusion: In our study we found sex differences regarding age and disease duration, being higher in women. As expected, the prevalence of RA was higher in women and AS and PsA in men. Overall, women used more steroids than men. An interesting finding was that patients had high disease activity. Future longitudinal analyses will allow us to analyse sex differences in disease progression and treatment response.

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FRI0547

THE EFFECT OF CORRECTED INFLAMMATION, OXIDATIVE STRESS AND ENDOTHELIAL DYSFUNCTION ON FMD LEVELS IN PATIENTS WITH SELECTED CHRONIC DISEASES: A QUASI-EXPERIMENTAL STUDY

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Background: While the pathophysiology of chronic disorders varies there are three basic mechanisms - inflammation, oxidative stress and endothelial dysfunction – that are common in many chronic diseases. These mechanisms,