

Impact of a Multidisciplinary Centre for Immune-Mediated Inflammatory Diseases on the Management of Psoriatic Arthritis: A Five-Year Analysis of Implementation

Marina Sánchez-Lucas^{1,2}, Camille Bourgeois^{1,2}, Ofelia Baniandrés³, Esther Chamorro de Vega⁴, Juan Molina-Collada^{1,2}, Teresa González^{1,2}, Amparo López-Esteban¹, Juan Carlos Nieto¹, José María Álvaro-Gracia^{1,2,5}, Isabel Castrejón^{1,2,5}

Department of Rheumatology, Hospital General Universitario Gregorio Marañón, Madrid, Spain. ²Instituto de Investigación Sanitaria Gregorio Marañón (IISGM), Madrid, Spain. ³Dermatology Department, HGUGM ⁴Pharmacy department, Hospital General Universitario Gregorio Marañón. ⁵Department of Medicine, Complutense University, Madrid, Spain

BACKGROUND

- Psoriatic arthritis (PsA) is an immune-mediated inflammatory disease (IMID) characterized by immune system dysregulation, leading to enthesitis, synovitis, skin manifestations, and involvement of the gastrointestinal tract, eyes, cardiovascular system, and/or metabolic syndrome.
- These diverse clinical manifestations underscore the necessity of a multidisciplinary approach to address the multiple challenges in delivering high-quality care to patients with PsA, from the pre-diagnosis phase through long-term follow-up.

OBJECTIVES

To evaluate the impact of an IMID multidisciplinary centre, established in February 2019 on the management of patients with PsA.

METHODS

- A specialized multidisciplinary centre (CEIMI) with a holistic approach to IMID patients was established at our University Medical Centre, which include 3 rheumatologists, 3 gastroenterologists, 2 dermatologists, 2 ophthalmologists, clinical nurse specialists, an on-site pharmacy, and immunization clinics.
- This integrated clinic model facilitates comprehensive patient evaluation and management through improved interdisciplinary communication and support educational activities for both patients and physicians.
- Patients with PsA on biologic or targeted synthetic DMARDs (b/tsDMARD) were identified and compared between rheumatology routine care and CEIMI multidisciplinary care.
- Clinical, demographic, and treatment variables and cardiovascular risk factors were retrospectively collected via electronic medical record.
- A descriptive analysis is presented.

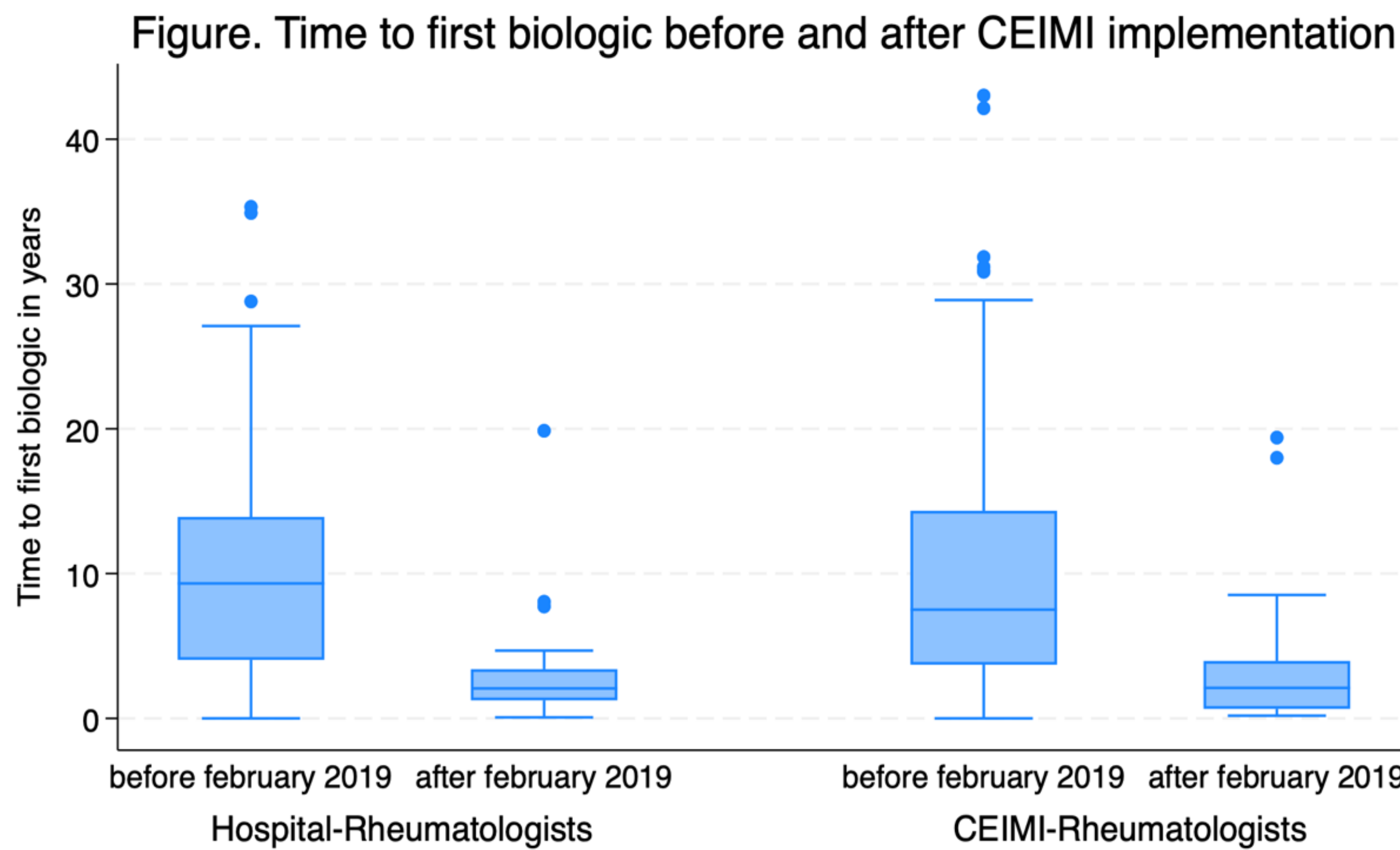
RESULTS

- A total of 278 patients were included, 123 (44%) with active follow-up at our routine care clinic and 155 (56%) at CEIMI-multidisciplinary care.
- Average age was 41.4, disease duration 13.8 years, 48.6% were female, with no significant differences between groups.
- Patients in the routine care group have higher BMI and higher proportion of obesity.
- A higher percentage of patients have an evaluation by a dermatologist (49.3 vs 25.9, p=0.003), and by the nurse specialist (94.4 vs 57.7, p<0.001) at CEIMI-multidisciplinary care, with a better evaluation for cardiovascular risk and smoking cessation recommendations

	All Patients N=278	Routine Care N=123	CEIMI N=155	p-value
Age, years, mean (SD)	41.4 (13.0)	41.5 (13.0)	41.3 (13.0)	0.88
Sex, n (%) female	135 (48.6)	62 (50.5)	72 (46.7)	0.54
Current smoker, n (%)	19 (6.8)	7 (5.7)	12 (7.7)	0.50
BMI, mean (SD)	26.8 (5.9)	31.9 (5.9)	24.7 (4.0)	0.001
Obesity, n (%)	6 (25)	4 (57.1)	2 (11.8)	0.02
Disease duration, years	13.8 (9.1)	13.6 (9.4)	14.0 (8.9)	0.74
DAPSA, mean (SD)	11.0 (9.6)	13.6 (14.3)	10.1 (7.4)	0.23
Time to first biologic, years, mean (SD)				
Before February 2019	10.2 (8.5)	9.9 (7.8)	10.4 (8.9)	0.66
After February 2019	3.6 (4.6)	3.2 (3.9)	4.1 (5.5)	0.50
Number of biologics, N (%)				0.28
• First line	150 (54.0)	71 (57.7)	79 (51.0)	
• Second line	66 (23.7)	30 (24.4)	36 (23.2)	
• Third or more	62 (22.3)	22 (17.9)	40 (25.8)	
Treatment, n (%)				
• TNFi	189 (68.0)	83 (67.5)	106 (68.4)	0.32
• Anti-IL17	41 (14.7)	15 (12.2)	26 (16.8)	
• JAKi	26 (9.3)	16 (13.0)	10 (6.4)	
• Anti-IL23	14 (5.0)	5 (4.1)	9 (5.8)	
• Apremilast	8 (2.9)	4 (3.2)	4 (2.6)	
Dermatologist evaluation, n (%)	103 (37.2)	32 (25.9)	76 (49.3)	0.003
Nurse specialist evaluation, n (%)	218 (78.4)	71 (57.7)	147 (94.8)	p<0.001
Smoking cessation recommendation, n (%)	78 (28.2)	24 (19.7)	62 (40.0)	p<0.001
Cardiovascular risk				p<0.001
• No evaluation	114 (51.8)	85 (69.1)	59 (38.1)	
• <2 risk factors	85 (30.6)	28 (22.8)	57 (36.8)	
• Complete evaluation	49 (17.6)	10 (8.1%)	39 (25.2)	

RESULTS

- Time to first biologic decrease significantly in both groups after CEIMI implementation, from 9.9 to 3.2 at routine care (p<0.001) and from 10.4 to 4.1 at CEIMI (p<0.001).
- Number of biologics and prescription patterns were similar between groups.



CONCLUSIONS

- Our multidisciplinary approach appears effective in improving management of psoriatic disease, as evidence by a significant reduction in the time to first biologic initiation in both groups.
- Patients under active follow-up at CEIMI multidisciplinary care demonstrated improved cardiovascular risk assessment and better control of risk factors, including smoking cessation and obesity.

Table: Patients demographic, clinical, and treatment characteristics in CEIMI versus routine care management

