

Comparison between Patients with Spondyloarthritis Managed in Community Based Care Settings to those Managed in Tertiary Research Setting in Ontario: An OBRI-SPARCC Study



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INTRODUCTION

- Spondyloarthritis (SpA) represents a major burden on our society attributed to the high prevalence affecting 0.5-1.5% of the population
- The most prevalent subtypes of SpA are ankylosing spondylitis (AS) and psoriatic arthritis (PsA)
- There is little data on the clinical features and disease severity of SpA patients managed in community-based rheumatology clinics in Ontario
- Patients with SpA in community practices may have less disease severity compared to those managed in tertiary care research settings

OBJECTIVE

To describe the disease status of SpA (AS and PsA) patients in the community-based Ontario Best Practices Research Initiative (OBRI) cohort and compare it with the tertiary care SpA Research Consortium of Canada (SPARCC –AS and PsA) cohort from Toronto.

METHODS

- New or follow up patients from 11 community centres enrolled into OBRI-SpA cohort from between March 2015 and March 2017 were matched 1:1 by assessment date (+/- 1.5 year) to patients followed at Toronto SPARCC clinics seen during the same time period
- Variables: demographics, disease features, extra articular manifestations (EAM), comorbidities, patient reported outcomes (PROMs), composite measures, labs, medications
- Analyses: descriptive statistics, t-test and two-proportion z-test

RESULTS

143 PsA and 174 AS patients were enrolled in the OBRI study and were matched 1:1 to patients in the SPARCC cohort at Toronto Western Hospital

Characteristics of the Patient Population at Enrollment							
Variable	PsA			AS			
	OBRI n=143	SPARCC n=143	p-value	OBRI n=174	SPARCC n=174	p-value	
Demographics	Age at visit (SD)	53.6 (12.2)	53.8 (13.8)	0.8999	49.8 (14.6)	41.7 (13.5)	<0.0001
	Age at diagnosis (SD)	43.5 (13.4)	37.6 (12.9)	0.0003	39.4(15)	29.4 (12.5)	<0.0001
	Female (%)	82 (57.3)	58 (40.6)	0.0045	64 (36.8)	55 (31.6)	0.235
	Male (%)	61 (42.7)	85 (59.4)		110 (63.2)	117 (67.2)	
	Caucasian (%)	122 (93.8)	123 (86)	<0.0001	143 (88.3)	124 (71.3)	<0.0001
Disease Characteristics	Swollen joint count (SD)	3.5 (4.4)	1.4 (4)	<0.001	0.5 (1.7)	0.2 (1)	0.0563
	Tender joint count(SD)	4.8 (6.8)	2.7 (5.6)	0.007	1.3 (3.5)	1 (3.3)	0.4174
	Enthesitis (%)	23 (16.1)	19 (13.8)	0.5862	32 (18.4)	7 (4.3)	<0.0001
	Dactylitis (%)	13 (9.1)	7 (5.1)	0.196	2 (1.1)	0	-
	Inflammatory back pain (%)	23 (16.1)	27 (19.4)	0.4628	88 (50.6)	135 (83.3)	<0.0001

Characteristics of the Patient Population at Enrollment

Variable	PsA			AS			
	OBRI n=143	SPARCC n=143	p-value	OBRI n=174	SPARCC n=174	p-value	
EAM	Psoriasis (%)	128 (89.5)	137 (95.8)	0.0413	28 (16.1)	9 (5.2)	0.001
	Uveitis (%)	2 (1.4)	1 (0.7)	0.5616	21 (12.1)	3 (1.7)	0.0001
	IBD (%)	5 (3.5)	1 (0.7)	0.0989	19 (10.9)	22 (12.6)	0.6179
Labs	MDA (%)	23 (16.1)	36 (25.2)	0.0575	-	-	-
	Elevated ESR/CRP (%)	44 (30.8)	100 (69.9)	<0.0001	68 (39.1)	55 (31.6%)	0.1449
PROMs	HAQ (SD)	0.9 (0.7)	0.5 (0.6)	<0.0001	0.7 (0.6)	0.7 (0.6)	0.5461
	BASDAI (SD)	-	-	-	3.7 (2.5)	3.8 (2.4)	0.4931
	BASFI (SD)	-	-	-	3.6 (2.8)	3 (2.7)	0.0439
Comorbidities	Depression (%)	18 (12.6)	7 (5)	0.0257	19 (10.9)	17 (10.5)	0.8997
	CVD (%)	10 (7)	6 (4.2)	0.3034	13 (7.5)	3 (1.7)	0.0105
	Cancer (%)	11 (7.7%)	3 (2.2%)	0.0347	11 (6.3)	4 (2.5)	0.0853
Rx	Diabetes (%)	19 (13.30)	15 (10.8)	0.52	11 (6.3)	3 (1.8)	0.0394
	DMARDs (%)	107 (74.8)	57 (39.9)	<0.0001	34 (19.5)	34 (19.5)	1.000
	Biologics (%)	53 (37.1)	56 (39.2)	0.7149	101 (58)	106 (60.9)	0.5851

CONCLUSIONS

Compared with patients seen in tertiary care research setting, SpA patients in community clinics in Ontario were older at diagnosis, had more peripheral arthritis (PsA), enthesitis (AS) and worse function. Use of biologic agents were similar. Strategies for earlier triage and referral in the community may help improve functional outcomes

