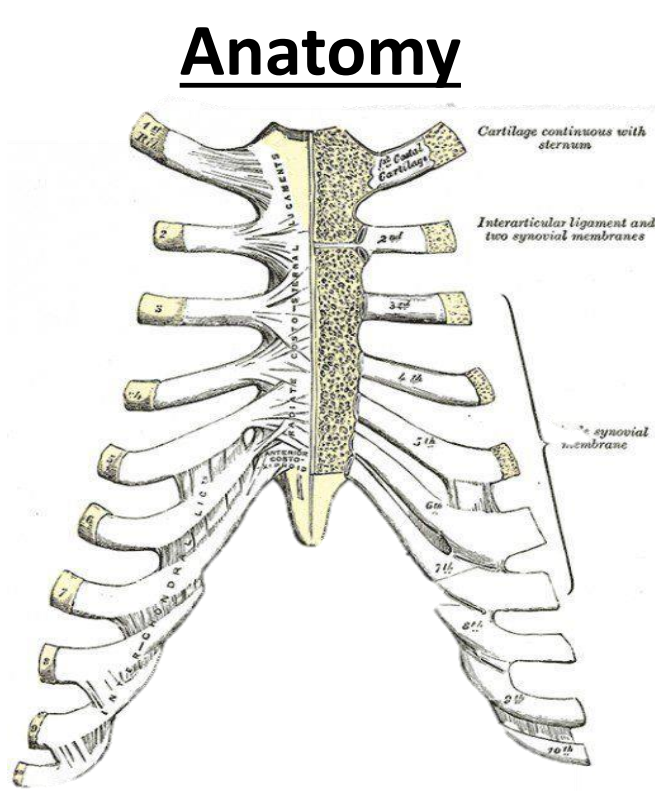


Prevalence of Sternal Bone edema in patients with Spondyloarthritis and Psoriatic Arthritis with axial involvement.

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Introduction:

- SpA and PsA are both characterized by enthesal involvement
- Prevalence and association of sternal enthesitis with disease activity and MRI lesions in other locations in patients with SpA and PsA are unknown.



With Sternal bone edema



Without Sternal Edema



Objectives:

To determine the prevalence of sternal edema and sterno-clavicular joint synovitis in patients with SpA and axial PsA with spine MRI.

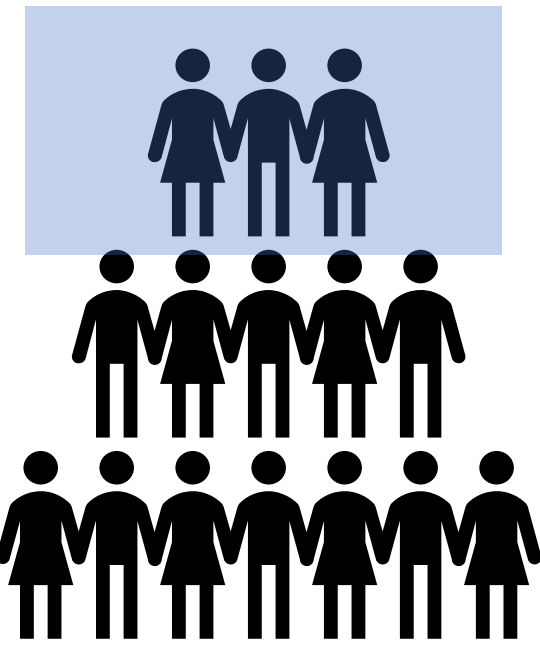
- To evaluate their association with:
- CANDEN SCORE (1)
 - SPARCC SCORE(2)
 - Peripheral arthritis (time of the MRI.)

- DAS 28 CRP
- BASDAI
- BASFI

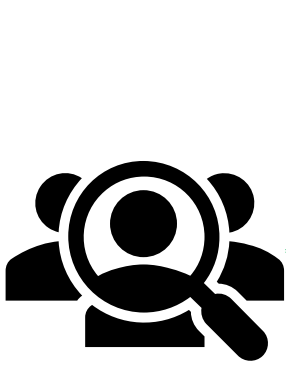
(1)Canada-Denmark MRI scoring system of the spine
(2) Spondyloarthritis Research Consortium of Canada

Materials and methods:

Subanalysis of a Cross-sectional study



Consecutive patients



PsA (CASPAR)
All patients: 34 →Patients
Thoracic MRI: 27

SpA (ASAS)
All patients: 45 →Patients
Thoracic MRI: 33



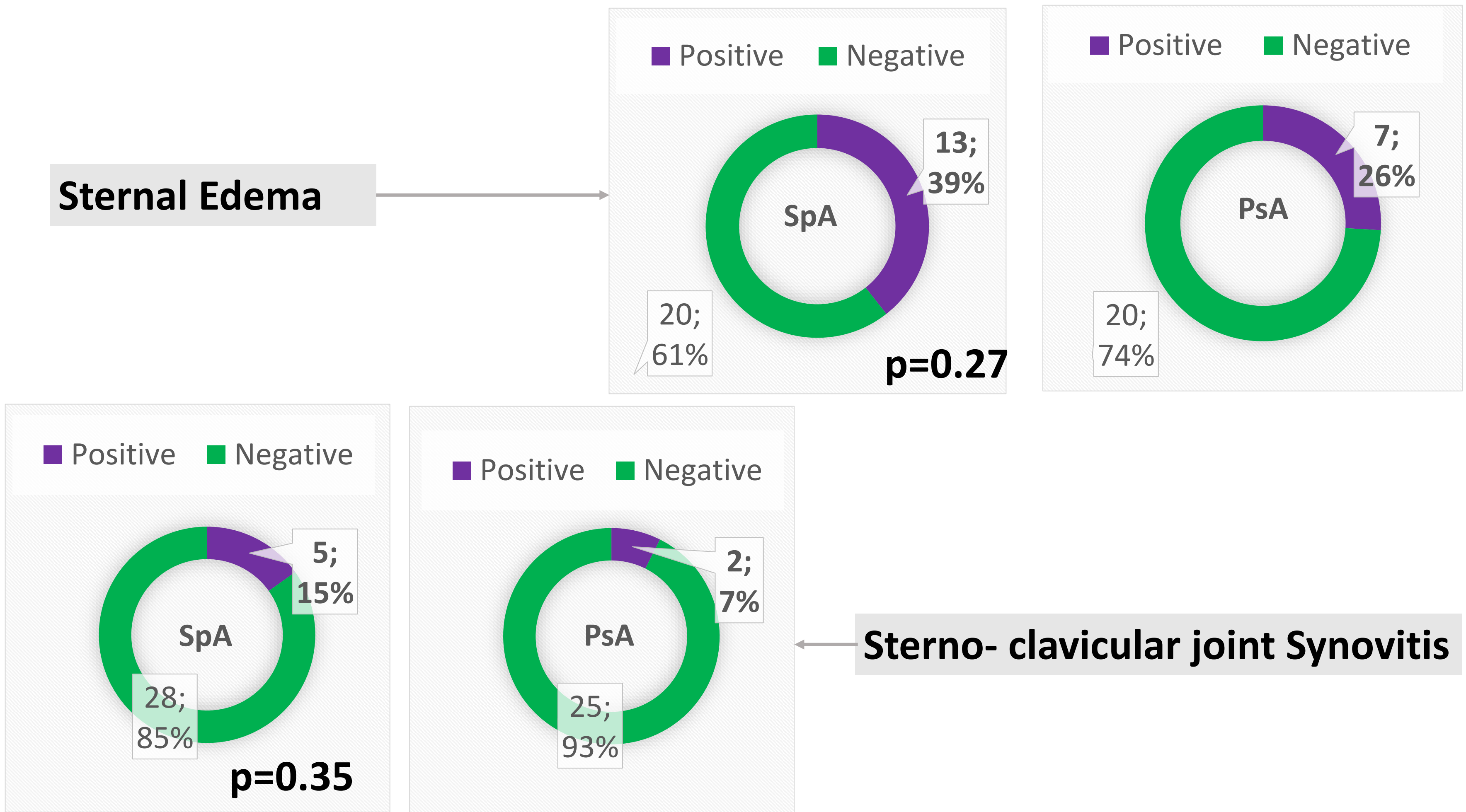
MRI

- Cervical spine
- Thoracic spine
- Lumbar spine
- Sacroiliac joint

Sternal bone Edema:
Hyperintense image in STIR Sequence in the Sternal bone.

Results:

Table 1	SpA (n=33)	Axial PsA(n=27)	P value
Clinical and demographic characteristics			
Male sex, n(%)	19 (57)	175 (55.6)	0.875
Age dx, mean (SD)	43.3 (14.8)	44.7 (14.6)	0.713
Disease duration in years, mean (SD)	36.9(14.2)	46.5 (11.8)	0.002
Skin %	0	100	0.000
Dactylitis,n (%)	1 (3)	7(26)	0.009
Enthesitis (MASES >1) , n (%)	5 (15)	2 (7.4)	0.353
BMI, mean (SD)	23.9 (3.2)	26.8 (3.6)	0.002
DAS 28 CRP mean (SD)	2 (0.61)	2.7 (1.4)	0.127
BASDAI, mean (SD)	3.2 (2)	4.7 (2.2)	0.022
BASFI, mean (SD)	2.2 (2.1)	3.4 (2.9)	0.082
BASMI, mean (SD)	1.9 (1.2)	2 .2 (1.5)	0.539
HLA B27, n (%)	20 (67)	2 (14)	0.001
	(30/33)	(14/27)	
CRP, median (IQR)	3.5 (1.3-12.5)	4 (1.6-9.4)	0.955
CRP >5 n (%)	16(48.5)	14 (52)	0.795
NSAIDs, n %	31 (94)	27(100)	0.193
Corticosteroids, n(%)	7 (21)	11 (41)	0.101
Methotrexate, n (%)	3 (9)	15 (56)	<0.001
Leflunomide, n %	1 (3)	2 (7)	0.439
Sulfasalazine, n %	1 (3)	0	0.362
Previous biological treatment, n %	0	3 (11)	0.014
Patients with PsA			
PASI, median (IQR)		7 (1-11)	
BSA, median (IQR)		1 (1-3)	
Vulgar psoriasis, n (%)		23 (85.2)	
Nail compromiso, n (%)		13 (48)	
Scalp, n(%)		19 (70.4)	
DAPSA, Mean (SD)		10.9 (11.4)	
DAPSA, MEDIAN (IQR)		8 (2-16)	



Characteristics of patients with and without Sternal edema by Disease

Table 2	PsA		P	SpA		P
	Sternal edema + (n=7)	Sternal edema – (n=20)		Sternal edema + (n=13)	Sternal edema – (n=19)	
CRP mean (SD)	11.9 (9.4)	17.4 (44.9)	0.77	9.3 (9.4)	7.8 (9.7)	0.67
BASDAI mean (SD)	4.9 (1.7)	4.6 (2.4)	0.84	3.1 (2.0)	3.3 (2.1)	0.79
BASFI mean (SD)	3.8 (2.5)	3.3 (3)	0.68	2.7 (2.5)	1.9 (1.7)	0.27
DAS 28 CRP mean (SD)	3.4 (1.7)	2.5 (1.3)	0.18	2.2 (0.7)	1.9 (0.56)	0.41
Arthritis (time of MRI)	71%	65%	0.56	31%	15%	0.28
SPARCC mean (SD)	3.7 (6.5)	4.5(9.5)	0.83	18.3 (20.3)	8.3(12.1)	0.09
CANDEN mean (SD)	6.8 (7)	7.95(9.4)	0.78	14.7 (14.8)	8.3 (7.7)	0.11

Conclusion:

- Sternal edema occurred in around one third of patients with SpA and axial PsA.
- There was no association of this feature with clinical or image activity.

- Limitations:**
- Subanalysis study where sternal edema was not an outcome
 - Did not evaluate associated clinical symptoms
 - Non-specific technique for the evaluation of the sternal region
 - No control group

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Full abstract scan here