Disease activity	BASDAI			ASDAS – CRP			
	month of conception	trimester 1	trimester 2	trimester 3	trimester 1	trimester 2	trimester 3
inactive/low	57,8%	33,3%	25,7%	35,3%	16,7%	14,3%	14,7%
mild	30,6%	36,1%	40%	26,5%	42,2%	28,6%	32,4%
high	11,1%	30,6%	31,4%	31,4%	33,3%	48,6%	41,2%
very high	5,6%	0	2,9%	2,9%	2,8%	8,9%	11,8%

When dividing patients into two groups depending on AS activity in the I trimester (group 1-low activity, group 2-moderate, high and very high activity), no significant change in the values of both BASDAI and ASDAS – CRP was identified in each group during pregnancy.

Conclusion: A tendency of increasing AS activity during the first half of pregnancy with no reverse until the end of gestation based on BASDAI and ASDAS – CRP values and CRP levels was found. There was a discrepancy in degree of activity assessed by the tools used: moderate and high disease activity was identified in greater number of AS patients based on ASDAS-CRP scores compared to BASDAI during the entire pregnancy. It is deemed necessary to continue research so that to identify the most adequate index for AS activity assessment during pregnancy.

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SAT0378

THE RELATIVE DIAGNOSTIC UTILITY OF INFLAMMATORY BACK PAIN CRITERIA IN AN INCEPTION COHORT OF PATIENTS WITH PSORIASIS, IRITIS, AND COLITIS PRESENTING WITH UNDIAGNOSED BACK PAIN

G. Kröber¹, U. Weber¹, R. Carmona², J. Yeung³, J. Chan⁴, S. Aydin⁵, L. Martin⁶, A. Masetto⁷, S. Keeling⁸, O. Ziouzina⁶, S. Rohekar⁹, R. Dadashova¹⁰, J. Paschke¹⁰, A. Carapellucci¹⁰, R. G. Lambert⁸, W. P. Maksymowych^{8,10}. ¹University of Southern Denmark, Sønderborg, Denmark; ²St. Joseph's Healthcare Hamilton, Hamilton, Canada; ³James Yeung Rheumatology, Richmond, Canada; ⁴Artus Health Centre, Vancouver, Canada; ⁵The Ottawa Hospital, Ottawa, Canada; ⁶University of Calgary, Calgary, Canada; ⁷Université de Sherbrooke, Sherbrooke, Canada; ⁸University of Alberta, Edmonton, Canada; ⁹Lawson Health Research Institute, London, Canada; ¹⁰CARE Arthritis, Edmonton, Canada

Background: Clinicians rely on the elicitation of features of inflammatory back pain (IBP) for diagnosis of axial spondyloarthritis (axSpA) but the utility of IBP criteria in patients presenting with extra-articular features of axSpA remains unclear. Assessment of utility should include not only rheumatologist diagnosis as benchmark but imaging to address the circularity between elicitation of IBP and clinical diagnosis.

Objectives: To assess the diagnostic utility of all criteria for IBP in patients with psoriasis, iritis, or colitis and undiagnosed back pain using the rheumatologist diagnosis and imaging as benchmarks.

Methods: Consecutive patients (n=246) with undiagnosed back pain ≤45 years of age, ≥3 months, with any one of psoriasis (n=46), acute anterior uveitis (AAU)

Table 1. Rheumatologist diagnosis as external reference.

	Sensitivity	Specificity	LR+	LR-
Psoriasis				
ASAS IBP	65.00%	52.00%	1.35	0.67
Berlin IBP	80.00%	36.00%	1.25	0.56
Calin IBP	80.00%	28.00%	1.11	0.71
All 3 criteria sets	60.00%	56.00%	1.36	0.71
IBP global >5	85.00%	36.00%	1.33	0.42
AAU				
ASAS IBP	84.44%	42.86%	1.48	0.36
Berlin IBP	80.00%	57.14%	1.87	0.35
Calin IBP	93.33%	17.86%	1.14	0.37
All 3 criteria sets	77.78%	60.71%	1.98	0.37
IBP global >5	86.67%	57.14%	2.02	0.23
IBD				
ASAS IBP	78.43%	45.07%	1.43	0.48
Berlin IBP	82.35%	52.11%	1.72	0.34
Calin IBP	84.31%	19.72%	1.05	0.80
All 3 criteria sets	70.59%	57.75%	1.67	0.51
IBP global >5	80.39%	66.20%	2.38	0.30

(n=73), or colitis (n=127) had diagnostic evaluation by a rheumatologist. Majority central reader assessment of MRI indicative of axSpA and diagnosis by the rheumatologist were external standards for testing the utility of these IBP criteria: ASAS, Berlin, Calin, rheumatologist global for IBP >5 (0-10 scale).

Results: AxSpA was diagnosed in 44.4%, 61.6%, and 41.8% of patients with psoriasis, iritis, and IBD, respectively. Diagnostic utility for all IBP criteria was comparably poor (Table 1). MRI was indicative of axSpA in 21.2%, 43.5%, and 19.7% of patients with psoriasis, iritis, and IBD. The utility of the IBP criteria was even worse using MRI as the external reference (Table 2), especially in patients with psoriasis. Only 14% of psoriasis patients with a positive MRI reported "improvement with exercise but not rest" as compared to 70% and 62% of patients with iritis and IBD, respectively.

Table 2. Central assessment that MRI is indicative of axSpA as external reference.

	Sensitivity	Specificity	LR+	LR-
Psoriasis				
ASAS IBP	28.57%	38.46%	0.46	1.86
Berlin IBP	42.86%	15.38%	0.51	3.71
Calin IBP	71.43%	23.08%	0.93	1.24
All 3 criteria sets	14.29%	42.31%	0.25	2.03
IBP global >5	85.71%	23.08%	1.11	0.62
AAU				
ASAS IBP	75.00%	26.92%	1.03	0.93
Berlin IBP	70.00%	38.46%	1.14	0.78
Calin IBP	90.00%	15.38%	1.06	0.65
All 3 criteria sets	65.00%	38.46%	1.06	0.91
IBP global >5	75.00%	38.46%	1.22	0.65
IBD				
ASAS IBP	92.31%	37.74%	1.48	0.20
Berlin IBP	76.92%	39.62%	1.27	0.58
Calin IBP	92.31%	16.98%	1.11	0.45
All 3 criteria sets	76.92%	45.28%	1.41	0.51
IBP global >5	92.31%	47.17%	1.75	0.16

Conclusion: All IBP criteria have poor diagnostic utility for diagnosis of axSpA, especially in patients with psoriasis. This reinforces the desirability of less subjective assessment tools, especially imaging.

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SAT0379

C-REACTIVE PROTEIN TO ALBUMIN RATIO IS ASSOCIATED WITH DISEASE ACTIVITY IN PATIENTS WITH AXIAL SPONDYLOARTHRITIS

Z. Zhong^{1,2}, Y. Huang¹, Q. Huang¹, T. Li^{1,2}. ¹Guangdong Second Provincial General Hospital, Department of Rheumatology and Immunology, Guangzhou, China; ² Southern Medical University, The Second School of Clinical Medicine, Guangzhou, China

Background: C-reactive protein to albumin ratio (CAR) has emerged as a significant biomarker to evaluate and predict systemic inflammation[1]. However, the role of CAR in patients with axial spondyloarthritis (axSpA) remains unknown.

Objectives: The aim of this study was to investigate the relationship between CAR and disease activity of axSpA.

Methods: A total of 241 patients and 61 healthy controls from Guangdong Second Provincial General Hospital from December 2015 to August 2019 were retrospectively recruited in this study. Patients were divided into two groups, with 176 patients in remission group (BASDAI<4) and 65 patients in active group (BASDAI≥4). Erythrocyte sedimentation rate (ESR), C-reactive protein (CRP), albumin (ALB), CAR, neutrophil-lymphocyte ratio (NLR), platelet-lymphocyte ratio (PLR) and monocyte-lymphocyte ratio (MLR) were detected. The correlations between CAR, NLR, PLR, MLR and disease activity were analyzed by the Spearman's correlations analysis. Receiver