Results: Only 7 articles that described the types of providers sought by patients with BP were identified (Table 1). Among patients with BP, 7%-45% sought chiropractic care; 26%-70% sought care from general practitioners, and 3%-37% sought care from rheumatologists. Patients who sought chiropractic care were mainly white, female, aged < 65 years old, and of higher socioeconomic and education status. Patients with CBP seeking rheumatologic care had a mean duration of CBP of 14-28 years and were mostly women (56%; age range, 41-50 years)[5]; of these, 1% were referred to a rheumatologist by chiropractors for symptoms suggestive of SpA.[5] Data regarding the prevalence of different types of BP (eg, acute, CBP, IBP) in US chiropractic practices were not available. No articles describing axSpA in patients in chiropractic care were identified.

Table 1. Diagnosis and Management of Back Pain in the United States: Practitioner Specialties

Study Description	Practitioner Specialties, %							
	Chiropractor	General Practitioner	Orthopedist	Rheumatologist	Other Specialist	Physical/ Massage Therapist	AC/CAM	Other
Gallup-Palmer College of Chiropractic 2016 Annual Report - Survey of adult preferences (n = 7586) for back pain care if costs were equal Reference: http://www.palmer.edu/uploadedFiles/Pages/Alumni/gallup-report-palmer-college-2016.pdf	28	53[a]	NR	NR	NR	13	1	4
Ghildayal 2016 - Analysis of Alternative Health Supplement NHIS data for 9665 adults with LBP Reference: Ghildayal N, et al. *Glob Adv Health Med.* 2016;5:69-78.	15	NR	NR	NR	NR	12	41	NR
Wilson 2015 - Analysis of data from the 2002-2012 MEPS for patients with back/joint pain diagnosis (n = 16,762) Reference: Wilson FA, et al. *J Eval Clin Pract.* 2015;21:952-957.	24	43	13	3	11	5	1	NR
Deodhar 2016 - Analysis of US commercial claims database of AS in 3336 patients with back pain diagnosed by a non-rheumatologist Reference: Deodhar A, et al. *Clin Rheumatol.* 2016;35:1769-1776).[b]	7[c]	26	4	37	NR	NR	NR	26
Sherman 2004 - Survey of 249 adults with CBP about their interest in CAM Reference: Sherman KJ, et al. *BMC Complement Altern Med.* 2004;4:9.	45	NR	NR	NR	NR	24	11	7
Carey 2010 - Telephone survey of 3276 adults in North Carolina with chronic back or neck pain, stratified by race (range) Reference: Carey TS, et al. *J Pain.* 2010;11:343-350.	22-34	50-70	24-42[d]	NR	NR	10-31[e]	2-7[f]	NR
Carey 1995 - Telephone survey of 4437 adults in North Carolina; CBP prevalence and care-seeking Reference: Carey TS, et al. *Spine (Phila Pa 1976).* 1995;20:312-317.	25	64	55	NR	NR	29	NR	NR

AC, acupuncturist; AS, ankylosing spondylitis; CAM, complementary and alternative medicine; CBP, chronic back pain; LBP, low back pain; MEPS, Medical Expenditure Panel Survey; NHIS, National Health Interview Survey; NR, not reported.
[a] Reported as medical doctor or primary care doctor in original study; [b] Data reported in this article are for a diagnosis of AS made by a given specialty; [c] Includes physical therapist visits; [d] Includes neurosurgeon visits; [e] Physical therapist visits only; [f] Massage therapist and/or AC visits.

Conclusion: Chiropractors, as primary spine care providers in the United States, are playing an increasingly larger role in the diagnosis and treatment of BP, with 7%-45% of patients with BP seeking chiropractic care. However, there are conflicting data on the types of BP treated by chiropractors in the United States. Nonetheless, since approximately 15% of patients with IBP have axSpA,[1,2] it is very likely that many patients seeking care from chiropractors in the United States have undiagnosed axSpA. This reveals a need for a systematic investigation for the presence of axSpA among patients being treated by chiropractors. Specific educational strategies targeted to chiropractors should be applied to increase awareness of axSpA and achieve early referral to rheumatologists for these patients.

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AB0719

PREVALENCE OF UNDIAGNOSED AXIAL SPONDYLOARTHRITIS IN PATIENTS WITH INFLAMMATORY BOWEL DISEASE: A SYSTEMATIC LITERATURE REVIEWAND PRIMARY RESEARCH STUDY

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Background: Axial spondyloarthritis (axSpA) encompasses psoriatic arthritis with axial disease, ankylosing spondylitis and non-radiological axSpA. Patients with axSpA have a high burden of inflammatory bowel disease (IBD) but few studies have investigated the proportion of IBD cases that have undiagnosed axSpA. Untreated axSpA could have a significant impact on the general health and quality of life of patients; therefore early diagnosis and treatment is crucial[1].
Objectives: This systematic literature review (SLR) aimed to identify the prevalence of undiagnosed axSpA in IBD cases based on cross-sectional imaging (MRI and CT scans) of the axial skeleton from published data.
Methods: This SLR was performed in keeping with MOOSE guidelines for observational studies. Original articles in all languages from 1990-2018 were retrieved from PubMed, Embase and Cochrane databases. Article reference lists were checked for further literature. Rheumatology conference (ACR, EULAR, GRAPPA, BSR, Gent Spondyloarthritis) abstract lists from 2012-2018 were reviewed and authors contacted for any additional unpublished data. All abstracts were reviewed by two authors to determine eligibility for inclusion.
Results: Twenty observational studies were identified: twelve published papers and eight abstracts. Thirteen studies assessed the prevalence of CT-sacroiliitis in IBD cases, two used magnetic resonance enterography (MRE) imaging and five used MRI imaging. The studies included a variety of patient demographics and IBD types. Sample sizes ranged between 25-1247 patients. Eleven studies included 2 independent radiology readers. The presence of inflammatory back pain was assessed in 7/20 studies, 5/20 included a control group and only 3/20 included a clinical rheumatology assessment. Thirteen studies used IBD imaging to assess for sacroiliitis compared to seven using dedicated MRI or CT imaging of the sacroiliac joints. The prevalence of sacroiliitis ranged from 2.2% to 68%. Eleven studies included patients with Crohns disease (average sacroiliitis prevalence 18.6%) and Ulcerative colitis (average sacroiliitis prevalence 17.4%), with 7/11 studies stating no significant difference in the prevalence of sacroiliitis between the two groups. Four studies identified an association of sacroiliitis with increased disease duration, two with increasing age and only one with IBD location.
Conclusion: From these studies, it appears that axSpA may affect a substantial number of patients with IBD and is likely to be significantly underdiagnosed. Cross-sectional imaging intended for the assessment of IBD can be utilised to screen for the presence of axSpA, perhaps even before the onset of musculoskeletal symptoms. Such patients could then be triaged for detailed rheumatological assessment. This review highlights the sparsity of data on the prevalence of axSpA in IBD cases. Few studies have included a clinical rheumatological assessment and just over half assessed for any potential difference in the prevalence of sacroiliitis in the Crohn's disease (CD) and Ulcerative colitis groups. This review has informed our prospective cross-sectional single-centre observational study, due to start in February 2019. We will assess the sensitivity and specificity of MRE as a screening tool for axSpA in a cohort of 600 CD cases, using clinical assessment and a dedicated axial MRI scan as the gold standard.

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AB0720 IMPACT OF SPONDYLOARTHRITIS ON THE MALE SEXUAL FUNCTION: LIMITING FACTORS

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Background: The impact of Spondyloarthritis (SpA) on patients' sexual life and erectile function has been gathering the attention of the scientific community over the last decade [1,2]. Several factors may condition sexual function for SpA patients: microangiopathy, pain, decreased range of motion, joint swelling and extraarticular features such as fatigue.
Objectives: To assess the erectile function and the sexual desire in a cohort of male patients with SpA and to identify the factors related to the disease limiting the sexual life.
Methods: This is a cross sectional study including sexually active male patients with SpA (ASAS criteria). A questionnaire was performed, consisting in two parts. One part filled by a rheumatologist with data of the disease (comorbidities, the presence of a coxitis, disease activity (BASDAI and ASDAS), function index (BASFI) and current treatment). The other part consisted in a questionnaire filled by an urologist, with data on pain during intercourse, the international index of erectile function (IEEF5), intensity and frequency of sexual desire and disease impact on private life. For statistical analysis, we used Khi^2-test for qualitative variables and Student-test for quantitative variables. A p value ≤0.05 was considered significant.
Results: We included 37 male patients with SpA, 18.9% had psoriatic arthritis, 51.4% had ankylosing spondylitis and 29.7% had inflammatory bowel disease spondyloarthritis. The mean age was 42.5 ± 1.8 years. Sixty two percent of patients were married. Mean disease duration was 11.4 ± 7.1 years. The mean disease activity and functional scores were as follow: BASDAI=2.57 ± 1.96, ASDAS CRP=2.36 ± 1.09, BASFI=2.59 ± 2.54). For the treatment side: 40.5% were on NSAIDs, 70.3% on csDMARDs and 56.8% of patients were on biotherapy (33.3% on Adalimumab, 52.4% on infliximab and 14.3% on Etanercept). The mean visual analog pain scale during intercourse was 2.97 ± 1.89 and the erectile function was deteriorated in 80.6% of patients.
Conclusion: Our results suggest the impact of SpA on patients' sexual function. Pain during intercourse and the limitation of the sexual desire were the most limiting factors of the sexual function.

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AB0721 EPIDEMIOLOGICAL, CLINICAL AND PROGRESSION FACTORS OF SPONDYLOARTHRITIS IN A TERTIARY CARE HOSPITAL

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Background: Spondyloarthritis (SpA) is a heterogeneous group of diseases that predominantly affect the axial skeleton, with a debut generally before 45 years. Among the factors favoring radiological progression[1] are, among others, high levels of CRP, tobacco consumption and diagnostic delay.
Objectives: To describe clinical-epidemiological characteristics and analyze possible factors of radiological progression (based on the development of syndesmophytes) in patients with a diagnosis of SpA in our hospital.
Methods: Retrospective, descriptive observational study of patients diagnosed with SpA (New York, ASAS and AMOR criteria) in the University Health Care Complex of León for 45 years (1973-2018).
Results: A total of 218 patients were collected, 59.6% were men and 40.4% were women with an average age of onset of symptoms of 30.56 ± 12.06 years and a diagnosis of 35.59 ± 12.26 (diagnostic delay defined by a median of 2 years before the great dispersion of data). 81.2% have HLA-B27 positive. 64.2% come predominantly León capital, also highlighting other areas such as La Bañeza (9.6%) and Astorga (6.4%). 13.8% are ex-smokers, 18.8% are active smokers and 67.4% are non-smokers. 68.3% made their debut with inflammatory low back pain. 67% developed some anterior uveitis throughout its evolution. 72.9% have axial involvement and 27.1% joint axial and peripheral involvement. 89.9% met criteria New York (NY), 8.3% criteria ASAS and 1.8% criteria AMOR for the diagnosis of SpA. 17.4% developed syndesmophytes. The activity of the disease was assessed by BASDAI and PCR (taking the reference point of our laboratory, 5 mg/l as the cut-off point) at the time of diagnosis and in the last control performed, showing that 87.6% presented a BASDAI> 4 at the time of diagnosis while in the last revision 84.9% has BASDAI <4; the elevated levels of CRP appeared in 54.45%, normalizing in 73.9% in the last control. We observed that the age of diagnosis <45 years (p 0.000289) in our sample is related to less progression due to the probable early initiation of biological treatment (18.2% in <45 years, 11% in> 45 years); while both elevated CRP at diagnosis (p 0.003) and exposure to tobacco (p 0.036) present a higher rate of syndesmophytes due to a probable higher inflammatory activity. For other variables (Sex, HLA-B27, BASDAI, diagnostic delay, presence of uveitis and NSAIDs), we did not obtain a statistically significant relationship.
Conclusion: - Most part of patients with SpA are young men, with HLA-B27 positive and axial involvement with debut as inflammatory back pain that meet NY criteria.
- High levels of CRP at diagnosis (p 0.003) and tobacco consumption (p 0.036) have been associated, in our sample, with greater radiological progression while the age of diagnosis <45 years is related to lower progression (p 0, 000289) may be due to the early introduction of biological treatment (18.2% in <45 years, 11% in> 45 years).

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AB0722 DOES THE ULTRASOUND OF SACROILIAC JOINTS CONTRIBUTE TO THE DIAGNOSIS OF SPONDYLOARTHRITIS?

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Background: Although pelvic radiography is a robust imaging modality to detect sacroiliitis, radiographic changes require at least 5 years to develop after symptom onset, hence the increasing interest in new imaging tools in the field of spondyloarthritis (SpA). Whereas the diagnostic utility of magnetic resonance imaging (MRI) and computed tomography (CT) of sacroiliac joints (SIJ) has been extensively studied in many cohorts, the contribution of SIJ ultrasound (US) in the diagnostic of SpA has been little-studied.
Objectives: The objective of this study is to assess the performance of SIJ US for detecting sacroiliitis and to determine its sensitivity and specificity in patients with SpA.
Methods: Consecutive patients, aged 16 years and over, consulting for symptoms suggestive of SpA (inflammatory back pain, enthesitis or dactylitis…) from February 2014 to February 2017 were enrolled in this cohort. Eligible patients underwent physical examinations, laboratory tests, SIJ US, CT and/or MRIs, following a standardized protocol. Patients with a conventional radiography showing a confirmed sacroiliitis (grade 3 or 4) were not included. The US was considered positive when showing a unilateral or bilateral vascularization (Doppler signals). Then, resistive index (RI) was measured. After analyzing clinical and radiological data and HLA typing, two experienced rheumatologists, blinded to US results, proceeded to the classification of the patients into 2 groups: confirmed SpA or no SpA. Their final diagnosis was considered the gold standard in interpreting the results of US examination.
Results: Forty-five patients, 10 men and 35 women, with an average age of 39 years were included. The mean duration of symptoms was 75 months (6 years). A family history of SpA was noted in 2.22% of