peripheral and axial spondyloarthritis, $n = 1$, peripheral inflammatory arthralgia, $n = 4$) with parallel evolution to intestinal symptoms ($n = 8$) or with independent evolution ($n = 3$). One patient had chondrocalcinosis ($n = 1$) (cf figure).

Among the 11 patients with articular manifestations linked to IBD, 10 were previously treated with anti-TNF α . The only predictive factor for inflammatory manifestation was a history of previous inflammatory articular manifestation, present in 43.8% ($n = 7/16$) of patients with inflammatory articular manifestation versus in 12.5% ($n = 10/80$) of patients without articular manifestation, $p = 0.007$.

Vedolizumab was stopped in 7 patients (6.3%), due to articular symptoms ($n = 1$), to digestive symptoms ($n = 4$) or both ($n = 2$).

Conclusion: Articular manifestations occurred in almost 30% of patients treated with vedolizumab. Half of them were inflammatory (15%), including 5% of early reversible arthralgia during perfusion. We observed 11 manifestations linked to IBD, including 7 spondyloarthritis, potentially unmasked by withdrawal of anti-TNF α . Indeed, the only predictive factor of inflammatory arthritis was history of previous articular inflammatory manifestation. However, withdrawal of vedolizumab because of inflammatory arthritis was necessary in only 0.9% of all patients.

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SAT0325 REDUCED STRAIN AND INCREASED STIFFNESS OF COMMON CAROTID ARTERIES IN PATIENTS WITH ANKYLOSING SPONDYLITIS

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Background: Ankylosing spondylitis (AS) is associated with an increased risk of cardiovascular disease (CVD) which also contributes to the increased mortality observed in AS. It is therefore important to develop non-invasive, accurate methods for early detection of atherosclerotic vascular changes. Studies, in other populations, have demonstrated associations between arterial stiffness and atherosclerotic burden and incident cardiovascular events. The arterial stiffness can be examined by ultrasound providing the β stiffness index that evaluates mechanical deformation properties. Technological advancements in ultrasound have developed a method assessing strain, using speckle tracking technique, which measures deformation mechanics in more dimensions. The speckle tracking method assessing arterial wall motion might permit earlier detection of subclinical CVD.

Objectives: To study, for the first time, bilateral common carotid arterial (CCA) circumferential strain and β stiffness index in patients with AS and 1) compare the results with age and sex-matched controls and 2) explore relationships between circumferential strain and β stiffness index with

Table.. Multivariable linear regression analysis in 149 patients with AS

Mean CCA circumferential strain, %			Mean β stiffness index, mmHg/mm		
Covariates	β	p-value	Covariates	β	p-value
Age, years	-0.22	0.021	Age, years	0.29	0.008
Anterior uveitis, Y/N	-0.17	0.021	Peripheral arthritis, Y/N	0.077	0.35
cs and/or bDMARD, Y/N	-0.15	0.036	Hypertensive disease, Y/N	0.066	0.43
BASFI, score	0.033	0.69	BASMI, score	0.12	0.32
BASMI, score	-0.008	0.93	Syndesmophyte, Y/N	-0.039	0.69
ESR, mm/h	-0.30	<0.001	Pack years, smokers, n	0.16	0.059
Cholesterol, mmol/L	-0.021	0.79	Pulse pressure, mmHg	-0.002	0.98
HDL, mmol/L	-0.094	0.22	Heart rate, bpm	0.13	0.12
Systolic blood pressure, mmHg	-0.025	0.81			
Diastolic blood pressure, mmHg	-0.121	0.22			
Heart rate, bpm	-0.16	0.038			
Adjusted R ² 0.31			Adjusted R ² 0.22		

disease activity, physical function and traditional risk factors for CVD in patients with AS.

Methods: A cohort of 149 patients with AS from Northern Sweden (Modif NY, mean age 55.3 $\pm$ 11.2 years, 102(68.5%) men, 146(98%) HLAB27) were assessed with spinal radiographs for mSASSS, clinical examination and BASMI, BASFI, ASDAS-CRP and BASDAI. Forty-six patients with AS (50.4 $\pm$ 8.7 years, 31(67%) men) and 46 age- and sex-matched controls (49.8 $\pm$ 9.2 years, 31(67%) men) with no known hypertension, diabetes or previous CV events were compared. Bilateral CCA ultrasound was carried out on all patients and controls. The circumferential systolic strain was measured and the β stiffness index was calculated. To analyze factors associated with strain and β stiffness index univariate and standard multivariable linear regression analyses were used. Variables with a univariate p-value ≤ 0.1 were considered for the multivariable models. For dichotomous variables, yes was coded 1 and no was coded 0.

Results: The mean strain was significantly lower in AS patients compared with controls, 7.9 $\pm$ 2.6% vs 10.3 $\pm$ 1.9%, $p < 0.001$ and the mean β stiffness index was significantly higher in AS compared to controls, 13.1 $\pm$ 1.6 mmHg/mm vs 12.3 $\pm$ 1.3 mmHg/mm, $p = 0.018$.

Conclusion: Both CCA strain and β stiffness index differed significantly between AS patients and controls indicating a worse subclinical arterial status in AS. The CCA strain was associated with several AS related variables while the β stiffness index with age and smoking indicating that the methods complement each other in the assessment of distensibility of arteries in patients with AS.

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SAT0326 PLANS FOR MOTHERHOOD ARE CHANGED AFTER DIAGNOSING ANKYLOSIS SPONDYLITIS (AS). AS FEMALE PATIENTS' ATTITUDE TO THE USE OF AS MEDICATIONS DURING PREGNANCY PLANNING AND CONCEPTION

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Background: Plans for motherhood are changed after diagnosing ankylosing spondylitis (AS). AS female patients' attitude to the use of AS medications during pregnancy planning and conception.

Objectives: To describe the impact of diagnosing AS on woman's plans to have children, and patients' attitude to continuing AS therapy while planning pregnancy or after definite conception.

Methods: 302 AS female patients participated in the survey conducted from May to November 2018. Patient's mean age was 32.4 $\pm$ 6.0 years, average AS duration from onset of symptoms was 10.2 $\pm$ 7.4 years. 224 (74.2%) respondents had higher education, 68 (22.5%) – vocational college education and 10 (3.3%) – secondary education. Totally 492 pregnancies were reported in 214 (70.9%) respondents, including 278 pregnancies before AS onset, while 214 occurred with underlying AS.

Results: 206 women (68.2%) have changed their attitude to potential pregnancy occurring during AS:

- 12 (5.8%) were firmly set to terminate an unplanned pregnancy;
- 21 (10.2%) were giving up on pregnancy because they already have children born before AS onset;
- 9 (4.4%) were against getting pregnant, although they yet haven't had children;
- 164 (79.6%) accepted potential pregnancy, although recognizing they would experience continuous emotional discomfort and fear for their own health and health of the unborn child.
- 42 (13%) women were distinctly against getting pregnant in case they have AS.

There was a weak inverse correlation between AS duration and changing patients' attitude to pregnancy ($R = -0.14$, $p < 0.05$).

150 (49.7%) respondents discussed pregnancy planning with a rheumatologist. Women with university degree were more likely to consult a rheumatologist before trying for a baby compared to subjects with vocational college and secondary education (55.5%, 35.3% and 40%, respectively; $p = 0.02$). 53 (35.3%) patients failed to receive a comprehensive answer to their questions related to AS and pregnancy mutual influence, the probability of AS inheritance by a child, safety of AS therapy at conception