Abstract AB1276 Table 1. Incidents rates of diabetes mellitus in patients with JIA compared to healthy population and asthma patients

	Healthy			Asthma			JIA		
	Cases	Person-years	IR (95% CI)	Cases	Person-years	IR (95% CI)	Cases	Person-years	IR (95% CI)
Type 1 DM	62	276,695	0.22 (0.17-0.28)	68	237,919	0.29 (0.23-0.37)	18	39,943	0.45 (0.28-0.71)
Type 2 DM	134	276,573	0.48 (0.41-0.57)	138	237,781	0.58 (0.49-0.69)	27	39,930	0.68 (0.47-0.99)
Composite DM	147	276,540	0.53 (0.45-0.62)	150	237,755	0.63 (0.54-0.74)	34	39,907	0.85 (0.61-1.19)

Results: There were 2142 hip and knee arthroplasty performed, including 1118 operations on patients with RA and 1024 operations on patients with OA. The number of local complications after total hip replacement was 155 (7.24%); 96 (8.59%) of them were patients with RA and 59 (5.76%) patients with OA.

There were 1177 hip arthroplasty performed, including 467 operations on patients with RA and 710 operations on patients with OA. The number of local complications after total hip replacement was 85 (7.22%); 48 (10.28%) of them were patients with RA and 37 (5.21%) patients with OA. There were 965 knee arthroplasty performed, including 651 operations with RA patients and 314 operations in patients with OA were performed. The number of local complications after total knee replacement was 70 (7.25%); 48 (7.37%) of them were patients with RA and 22 (7.00%) patients with OA.

We revealed a significantly greater number of complications in patients with RA ($p < 0.005$).

Conclusion: Local complications after hip and knee arthroplasty with RA patients (8.59%) more than in OA patients (5.76%) in 1.5 times. It shows us that the operative treatment of patients with RA requires a special approach and more gentle management of patients with RA in co-operation with rheumatologist and careful treatment of the bone with surrounding tissues during the surgery.

Disclosure of Interests: None declared

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AB1276 THE RISK OF DIABETES MELLITUS IN PATIENTS WITH JUVENILE IDIOPATHIC ARTHRITIS: A COHORT STUDY

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Background: Few studies have suggested higher prevalence of type 1 diabetes mellitus (DM) in juvenile idiopathic arthritis (JIA). To date, the risk of type 1 or 2 DM among patients with JIA patients has not been fully understood.

Objectives: To examine the incidence rate (IR) of DM in JIA patients compared to patients with asthma and healthy children.

Methods: We conducted a cohort study using a U.S. claims data from Truven MarketScan (2005-2016). We identified individuals between age 6 and 18 with ≥ 2 diagnoses of JIA with International Classification of Diseases (ICD)-9 and 10 diagnostic codes followed by one dispensing of JIA-treatment medication. For comparison, we selected 1) children with asthma and 2) healthy individuals. Each JIA patient was matched by age, sex and index date to 5 asthma patients and 5 healthy children. The primary outcome was DM, identified with 1 ICD diagnostic code followed by one dispensing of an antidiabetic drug. We assessed type 1 DM and type 2 DM separately, and composite endpoint of type 1 or 2 DM. IR and hazard ratio (HR) of DM in JIA patients versus patients with asthma and healthy subjects was calculated along with stratification by age (6 to 12 versus 13 to 18).

Results: After 1:5 matching, there were 74,385 healthy children, 74,385 asthma patients, and 14,877 JIA patients. The mean age in all cohorts was 13.9 years and 66.9% were female. During a mean follow up of 3.72 years, the composite IR of DM in the JIA group was 0.85 per 1,000 person-years (95% Confidence Interval [CI], 0.61-1.19) compared to 0.63 (0.54-0.74) per 1,000 person-years in the asthma population and 0.53 (0.45-0.62) per 1,000 person-years in the healthy population (Table 1). The multivariable adjusted HR (95% CI) associated with DM in JIA

was 1.27 (0.77-2.07) compared to the asthma group and 1.47 (0.90-2.42) compared to the healthy population (Table 2). Age-stratified analyses also showed numerically increased risk of DM in JIA patients.

Conclusion: In our cohort of 163,647 children with 14,877 JIA patients, JIA was associated with a numerically higher, albeit not statistically significant, risk of type 1 or 2 DM compared to asthma patients or healthy children.

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† The study cohorts were age-, sex-, and index date-matched. IR is per 1,000 person-years

Abstract AB1276 Table 2. Hazard ratio of diabetes mellitus in patients with JIA compared to healthy population and asthma patients

	JIA vs Asthma		JIA vs Healthy Children	
	Unadjusted HR (95% CI)	Multivariable HR (95% CI)	Unadjusted HR (95% CI)	Multivariable HR (95% CI)
Type 1 DM	1.54 (0.91-2.58)	1.51 (0.76-3.03)	1.93 (1.14-3.27)	1.62 (0.80-3.25)
Type 2 DM	1.20 (0.79-1.81)	1.10 (0.64-1.89)	1.41 (0.93-2.14)	1.30 (0.74-2.26)
Composite DM	1.37 (0.94-1.98)	1.27 (0.77-2.07)	1.59 (1.09-2.31)	1.47 (0.90-2.42)

† The full model includes age, demographics, comorbidities, medications, and health care utilization factors

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AB1277 PREVALENCE OF THE DIFFERENT ANTI-CARBAMYLATED PROTEIN ANTIBODIES ISOFORMS IN FIRST-DEGREE RELATIVES OF PATIENTS WITH RHEUMATOID ARTHRITIS IN A LATIN POPULATION

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Background: Rheumatoid arthritis (RA) affects approximately 1.5% of the population worldwide and 0.5-3.3% of the Mexican population¹. Anti-carbamylated proteins (anti-CarP) antibodies are identified in RA patients with a prevalence up to 44%², early arthritis, first-degree relatives (FDR) of patients with RA with a prevalence of 18%, and healthy controls with a prevalence of 4.7%. There is no evidence regarding the prevalence of the three different isoforms of anti-CarP antibodies worldwide.

Objectives: Establish the prevalence of the different isoforms of anti-CarP antibodies (IgA, IgM, IgG) in FDRs of patients with RA.

Methods: It is an observational descriptive cohort. Subjects underwent a complete physical examination, made by a certificated rheumatologist, which included clinical and serological measurements. The serological measurements included anti-citrullinated peptides antibodies (ACPA), RF, and anti-CarP detected by ELISA using carbamylated fetal calf serum, according to Shin J et al with some modifications. The cut-offs for the

anti-CarP IgA isoform was >125 U/mL, for the IgG isoform was >90 U/mL, and for the IgM isoform was >300 U/mL. The FDRs were classified as: suspicious arthralgia for progression according to Van Steenbergen criteria; undifferentiated arthritis (UA) and RA according to ACR/EULAR 2010; and soft tissue rheumatic diseases.

Results: A total of 144 FDRs from 99 RA patients were enrolled. The demographic characteristics are shown in Table 1. The prevalence (Table 2) for anti-CarP was 2.8% for IgA, 4.2% for IgG, whereas IgM was not detected. The serologic association was for RF/ACPA 4.48%, RF/anti-CarP 2.7%, FR 64.5%, ACPA 1.3%, ACPA/anti-CarP 0.69%, anti-CarP 3.4%, and no RF/ACPA/anti-CarP was observed.

The group of suspicious arthralgia for progression had 2 subjects positive for IgG anti-CarP, the group of UA had 1 subject positive for IgA anti-CarP, albeit no anti-CarP for the RA group was present. Soft tissue rheumatic diseases group had 5 subjects positive for IgG anti-CarP, while the asymptomatic group had 2 subjects positive for IgA anti-CarP.

Table 1

Population, n (%)	144 (100%)
Age (years), median (IQR)	45.25 (18-76)
Weight (kg), median (IQR)	70 (42-117)
Height (meters), median (IQR)	1.61 (1.44-1.88)
BMI, median (IQR)	26.19 (16.7-47.3)
Female, n (%)	119 (82%)
HAQ, median (IQR)	0.29 (0-2.15)

IQR: interquartile range, Kg: kilograms; BMI: body mass index, HAQ: Health Assessment Questionnaire

Abstract AB1277 Table 2

	POSITIVE, n (%)	MIN/MAX	MEDIAN
CRP, mg/dL	19 (13%)	0.0-2.27	0.36
ESR, mm/H; mean (SD)	37 (25.3%)	1-72	13.0 (11.95)
Anti-CarP, U/mL			
IgA	4 (2.8%)	0.0-818	2.0
IgM	0 (0.0%)	0.0-56	5.45
IgG	6 (4.2%)	0.0-187	8.0
Rheumatoid Factor, U/mL			
IgA	31 (21.5%)	1-219	6.96
IgM	64 (44.4%)	1-205	15
IgG	14 (9.7%)	1-160	3.04
ACPA-IgG, U/mL	10 (7%)	1-200	1.21

CRP: C Reactive Protein; ESR: erythrocyte Sedimentation Ratio; anti-CarP: Anti-Carbamylated Protein; SD: Standard Deviation; ACPA: anti-Citrullinated Peptides Antibodies.

Conclusion: Even though we used the 3 isoforms of anti-CarP antibodies, the prevalence of these antibodies in our cohort showed less positivity than other cohorts, who only detected the IgG isoform, worldwide.

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AB1278

ANNOUNCEMENT OF CHRONIC RHEUMATIC INFLAMMATORY DISEASE: THE RHEUMATOLOGIST'S POINT OF VIEW

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Background: The onset of a chronic rheumatic inflammatory disease (CRD) is a turmoil in a patient's life. The announcement, first step of information (a legal and ethical necessity), will leave a lasting impression in a patient's history.

Objectives: Determine the rheumatologist's methods to reveal a potentially disabling disease with an uncertain prognosis. Compare, in the discussion chapter, the rheumatologist's vision and the patient's experience at the time of the announcement.

Methods: 39 private practice rheumatologists from the CREER group. 52% women, mean age 59 years. 222 CRD including 56% rheumatoid arthritis (RA), 27% spondyloarthritis (SPA), 17% others. Survey including

31 questions. Direct eye contact 89%, gesture 56%, modulated tone 49%, silence 36%, compassionate approach 26%. Gaining confidence by : availability, listening to, explanations, empathy, frankness.

The rheumatologist thinks that he is reassuring and comforting 100%, empathic 98%, transparent 72%. He calms 42%, supports, is optimistic because he is sensitive to the patient's reactions 61%, but sometimes destabilized by a treatment refusal. He mentions life quality 51%, invites him to question it 58%, encourages him on a mutual management of the CRD 92% and insists on treatment compliance. He gives few documents, rarely mentions patient organizations, speaks about chronic disorder status, informs the treating physician and is always available.

Results: The announcement is different depending on : the type of CRD (59%), its presentation, the prognosis (29%), the induced emotion, the patient's profile, 82% (intellect 41%, personality 22%, age 16%), the information to provide (course, treatment).

Duration of consultation : long 51%, doubled 64%. Time given to assimilate the information 93%, to discuss 90%. Explanations given 100%, rephrased 32%, repeated 27%, verified 9%.

Announcement unchanged if patient alone or accompanied; handling adapted to its degree of worry. If patient is anxious, depressive, rebellious or denying : see him again 29%, re-explain 22%, listen to him, adapt.

When comparing the rheumatologist's and the patient's assessment about the announcement, there is globally an agreement, but it's less affirmative for all the items. However, the patient thinks his rheumatologist more frank than he really is. Indeed, he announces with feeling and spends time on it, but not enough for the patient. He is less comforting, reassuring and explaining what he believes. He mentions the treatment inconveniences and life quality, which is well perceived. But he should guide more to annex treatments. For all the suggested items, the SPA patients are less optimistic than the RA patients.

Conclusion: the announcement takes into account above all the patient's profile, the type and the seriousness of the CRD. The rheumatologist dedicates a lot of time on the announcement, which is made step by step, but still too fast for the patient. He explains, listens to, reassures, comforts by using human methods to gain the patient's confidence. He supports him and helps him to manage his disease. He involves the patient and stays available. The patient feels well informed and taken care of in his entirety with empathy.

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AB1279

PHYSICAL ACTIVITY LEVELS AND ATTITUDES IN PATIENTS WITH AXIAL AND PERIPHERAL SPONDYLOARTHRITIS

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Background: Spondylarthritis is one of the common inflammatory rheumatic diseases in adults, with an overall prevalence of 0.5 to 1%. Based on clinical manifestations and the Assessment in Spondylarthrosis International Society (ASAS) criteria, spondyloarthritis can be distinguished as predominately axial or peripheral. Despite the health-related benefits of regular physical activity, patients with spondyloarthritis, are generally less active than those without disease. Studies evaluating the differences in physical activity levels and attitudes towards exercise of patients with axial and peripheral spondyloarthritis are limited.

Objectives: To characterize and compare self-reported physical activity and attitudes towards exercise among patients with axial and peripheral spondyloarthritis.

Methods: We used baseline information from an on-going, longitudinal, single-site, prospective cohort study consisting of 244 patients with spondyloarthritis including psoriatic arthritis, ankylosing spondylitis, and other spondyloarthropathies. Attitudes and beliefs towards exercise were assessed from 5 domains including: 1) general attitude towards exercise; 2) support from other people; 3) benefits in exercise/physically active; 4) concerns about being active; and 5) exercise/physical activity behavior. A continuous scale (range: 0 -100) was used to evaluate attitudes and beliefs towards exercise. High scores indicated that the individual found exercise to be beneficial and/or liked engaging in physical activity. Physical activity was evaluated using the Nurses' Health Study physical activity questionnaire II (NHSPAQ II). Physical activity levels were assessed using