

Methods: Data from 2,846 unselected patients of the European Map of Axial Spondyloarthritis (EMAS) through an online survey (2017-2018) across 13 countries were analysed. The impact of axSpA on patients' sexual life was evaluated by a question assessing changes in the frequency of intimate relations since the onset of axSpA on a 5 point Likert scale. Impact of axSpA on the spousal relationship since disease onset was also assessed using 5 point Likert scale. Other lifestyle variables included smoking and physical activity and burden of disease [BASDAI (0-10), spinal stiffness (3-12), functional limitation in intimate relations (0-2), and psychological distress (GHQ-12)]. Regression analysis were carried out to determine the relative weight of the assessed variables.

Results: EMAS total sample mean age was 43.9 years, 61.3% were female, 48.1% had a university degree, and 67.9% were married. Out of the 2,515 participants that reported on the frequency of intimate relations since disease onset, 56.4% declared that it was less or much less than before; 74.1% declared high or medium limitation in intimate relations; and 30.4% reported worsening relations with their spouse. A lower frequency of intimate relations was related to: older age, female gender, higher BASDAI, spinal stiffness, higher functional limitation in intimate relations, higher psychological distress, self-reported diagnosis of depression, worsening relationship with spouse since disease onset, higher BMI, smoking, lack of physical activity, and lack of biologics use. In the multivariate regression analysis, the most strongly associated variables with lower frequency of intimate relations were: functional limitation in intimate relations ($\beta = 0.218$; 95% CI 0.185 – 0.251), worse relationship with spouse ($\beta = 0.207$; 95% CI = 0.165 - 0.250), female gender ($\beta = 0.150$; 95% CI 0.071 – 0.229), and no engaging in physical activity ($\beta = -0.135$; 95% CI -0.234 – -0.036) (Table 2).

Conclusion: EMAS results reveal a great impact of axSpA on patients' sexual life, with multiple sociodemographic, lifestyle and PROs being associated with a lower frequency of intimate relations.

Table 1. Regression analysis to predict frequency of intimate relations

	Simple linear regression			Multivariable stepwise linear regression		
	B	95% CI	p	B	95% CI	p
Age (Years)	0.007	0.004,0.010	<0.001	0.010	0.007,0.013	<0.001
Gender (Female)	0.215	0.146,0.284	<0.001	0.150	0.071,0.229	<0.001
BASDAI	0.124	0.107,0.141	<0.001	0.029	0.007,0.050	0.010
Spinal Stiffness	0.089	0.075,0.102	<0.001	NA	NA	0.214
Functional Limitation – Intimate relations	0.297	0.271,0.323	<0.001	0.218	0.185,0.251	<0.001
GHQ-12	0.067	0.059,0.075	<0.001	0.035	0.024,0.045	<0.001
Depression (Yes)	0.375	0.298,0.452	<0.001	NA	NA	0.064
Relationship with spouse	0.343	0.306,0.380	<0.001	0.207	0.165,0.250	<0.001
BMI	0.017	0.011,0.024	<0.001	0.008	0.001,0.015	0.031
Smoking (Yes)	0.075	0.002,0.148	0.044	NA	NA	0.907
Physical activity (Yes)	-0.212	-0.306,-0.119	<0.001	-0.135	-0.234,-0.036	0.007
Biologics (Yes)	0.188	0.110,0.267	<0.001	NA	NA	0.185

Acknowledgments: Funded by Novartis Pharma AG

Disclosure of Interests: Marco Garrido-Cumbrera: None declared, Christine Bundy Grant/research support from: Has received unrelated honoraria from Abbvie, Celgene, Janssen, Lilly, Novartis, and Pfizer., Denis Poddubnyy Grant/research support from: AbbVie, MSD, Novartis, and Pfizer, Consultant of: AbbVie, Bristol-Myers Squibb, Eli Lilly, MSD, Novartis, Pfizer, Roche, UCB, Speakers bureau: AbbVie, Bristol-Myers Squibb, Eli Lilly, MSD, Novartis, Pfizer, Roche, UCB, Souzi Makri: None declared, Raj Mahapatra: None declared, Sergio Sanz-Gómez: None declared, Laura Christen: None declared, Carlos Jesús Delgado-Domínguez: None declared, Victoria Navarro-Compán Consultant of: Abbvie, Lilly, Novartis, Pfizer, UCB, Speakers bureau: AbbVie, MSD, Lilly, Novartis, Pfizer, UCB

DOI: 10.1136/annrheumdis-2020-eular.4277

OP0082 GROWTH AND DEVELOPMENT OF CHILDREN FROM MOTHERS WITH ANKYLOSING SPONDYLITIS

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Background: Ankylosing spondylitis (AS) is a chronic inflammatory disease featured with involvement of sacroiliac joint and starts in the second or third decade

of life. Female patients with AS are mostly in childbearing ages. There are several studies of pregnancy outcomes but no studies about their offsprings.

Objectives: The objective of our study was to investigate the growth and development of offsprings from AS mothers.

Methods: This is a nationwide population-based case-control study using two South Korean databases that are managed by the National Health Insurance Service (NHIS): (1) the National Health Screening Program for Infants and Children (NHSIC) database, which records screening data of the growth and development of all children; (2) the NHIS database, which covers the entire population and includes comprehensive health claims data. In Korea, the NIH supports patients with 133 rare severe, intractable diseases including AS via a registration system of rare intractable disease (RID). We enrolled subjects born from 2008–2013 who had participated in the NHSIC program at three consecutive times; during 4-6 months (1st), 9-12 months (2nd), either 54-65months or 66-71 months (6th, 7th). The Korean Developmental screening test (K-DST) was used to assess development. By linking maternal and offspring healthcare data through their unique personal identification numbers, we constructed a mother-child database to track the growth of the child. We classified childrens from AS mothers using RID system (ICD code M45.X) and those from non-AS mothers. The primary outcome was to compare the growth and development of offsprings from AS mothers and those from general population. The secondary outcome was to compare the growth and development of offsprings from mothers who diagnosed AS before delivery (ante-partum, AS-AP) and those from mothers who diagnosed AS after delivery (postpartum, AS-PP). Low birth weight (LBW) was defined as a birth weight below 2500g. Growth retardation (GR) was defined as a body weight below 10th percentile according to birth weight reference curves for the south Korean population.

Results: A total of 794,544 subjects were identified. Among those cohort subject, there were 369 subjects with AS mother (124 subjects from AS-AP, 245 subjects from AS-PP) while 794,175 subjects with non-AS mother. Offsprings with LBW were comparable between those from AS mother and non-AS mother (OR 1.3, 95% CI 0.74-2.02). At 4-6 months, an OR of GR was comparable between two groups (OR 1.18, 95% CI 0.72-1.92) but increased at 9-12 months (OR 1.62, 95%CI 1.14-2.31) in infants from AS mothers. This difference disappeared at 54-71months (OR 0.24,95% CI 0.87-1.74). An OR of development abnormality (i.e. children needed the further evaluation or the follow-up test by K-DST) was also comparable between two groups (OR 0.94, 95% CI 0.71-1.25). Mothers with AS-AP had as about three times as a higher OR for having babies with LBW than mothers with AS-PP (OR 2.8, 95% CI 1.15-6.86). At 4-6 months, an OR of GR was comparable between two groups (OR 0.59, 95% CI 0.19-1.86) but decreased at 9-12 months (OR 0.39, 95%CI 0.16-0.98) in infants from AS-PP. This difference disappeared at 54-71months (OR 0.63,95% CI 0.29-1.39). An OR of development abnormality (i.e. children needed the further evaluation or the follow-up test by K-DST) was also comparable between two groups (OR 1.37, 95% CI 0.77-2.43).

Conclusion: Growth and development of children from AS mothers were comparable with those from non-AS mothers. Although mothers with AS-AP had significantly higher ORs for having LBW babies than those with AS-PP, their growth and development were comparable between two groups in young childhood.

Disclosure of Interests: None declared

DOI: 10.1136/annrheumdis-2020-eular.3682

Pain pathology, progression and pharmacotherapy

OP0083 DORSAL ROOT GANGLIA INFILTRATING MACROPHAGES MAINTAIN OSTEOARTHRITIS PAIN

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Background: Pain is a major debilitating symptom of knee osteoarthritis (OA). However, the extent of joint damage in OA does not correlate well with the severity of pain. The mechanisms that govern OA pain are poorly understood. Immune cells infiltrating nervous tissue may contribute to pain maintenance.

Objectives: Here we investigated the role of macrophages in the initiation and maintenance of OA pain.

Methods: Knee joint damage was induced by an unilateral injection of mono-iodoacetate (MIA) or after application of a groove at the femoral condyles of rats fed on high fat diet. Pain-like behaviors were followed over time using von Frey test and dynamic weight bearing. Joint damage was assessed by histology. Dorsal root ganglia (DRG) infiltrating immune cells were assessed over time using flow cytometry. To deplete monocytes and