

SATURDAY, 17 JUNE 2017

HPR patients' perspectives, functioning and health (descriptive: qualitative or quantitative)

SAT0717-HPR PREGNANCY AND DELIVERY IN PATIENTS WITH RHEUMATOID ARTHRITIS AND SPONDYLOARTHRITIS

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Background: Inflammatory rheumatic disease do have an influence on pregnancy course and outcome. There is little knowledge about the comparison between two rheumatic diseases.

Objectives: To analyze pregnancy complications, pregnancy outcome and delivery mode in patients with rheumatoid arthritis (RA) and spondyloarthritis (SpA).

Methods: Patients with RA and SpA were compared with those of matched healthy controls (HC) with respect to pregnancy complications, pregnancy outcome and delivery mode. Patients and controls were prospectively followed at the University of Bern.

Results: We analyzed 244 pregnancies, of which 96 pregnancies occurred in 86 RA patients, 78 in 70 SpA patients and 70 in 70 healthy women.

Pregnancy complications (gestational diabetes, preeclampsia, infection, premature rupture of membranes) were more frequent in RA patients (11.5%) and in SpA patients (17.9%) than in HC (1.4%).

Pregnancy outcome of 174 pregnancies in RA and SpA patients resulted in 178 live born infants, 6 sets of twins, one stillbirth and one induced fetal demise. The induced fetal demise was performed in a twin pregnancy on a fetus with a congenital anomaly. Congenital anomalies occurred in 6 infants (3 in RA and 3 in SpA patients). All HC had live births. Median birth weight was lower in patients compared with HC (RA: 3100g, SpA: 3245g, HC: 3455g). RA and SpA patients had more often small for gestational age infants (birth weight <10th percentile; RA: 16.2%, SpA: 11.4%, HC: 1.4%) and preterm deliveries (RA: 18.8%, SpA: 11.5%, HC: 1.4%).

With regard to delivery mode, most women had vaginal deliveries (RA: 51.0%, SpA: 57.7%, HC: 72.9%). Birth by caesarean section (elective and emergency), was more frequent in RA and SpA patients than in the healthy controls (RA: 44.8%, SpA: 39.7%, HC: 27.2%). Emergency caesarean sections were indicated in 22.9% of pregnancies among RA patients, in 21.8% of SpA patients and in 14.3% of healthy women.

Conclusions: Pregnancy complications, caesarean section, and adverse child outcomes were more frequent in patients with RA and SpA compared to healthy women. However, no significant differences in pregnancy outcomes were observed between RA and SpA patients indicating comparable risks induced by the autoimmune inflammatory process.

Disclosure of Interest: None declared

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HPR measuring health (development and measurement properties of PROs, tests, devices)

SAT0718-HPR INFLUENCE OF PATIENT GLOBAL ASSESSMENT ON THE DISEASE ACTIVITY ASSESSMENT IN PATIENTS WITH RHEUMATOID ARTHRITIS: A METEOR CROSS-SECTIONAL STUDY

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Background: Disease activity indices (DAI) are used to guide immunosuppressive therapy in rheumatoid arthritis (RA). The inclusion of patient global assessment (PGA) in these indices has been questioned as it conveys mainly disease impact rather than disease activity.

Objectives: To determine the influence of PGA on patient disease states and to determine PGA correlations with inflammatory parameters, disease impact, demographic, clinical and contextual factors.

Methods: The METEOR international database was used, namely data from patients' first available visit with no missing values on PGA, tender and swollen joint counts (TJC28, SJC28) and C-reactive protein (CRP). Remission rates were compared according to the DAS28CRP3v vs 4v and ACR/EULAR Boolean remission vs near-remission (failing 1 of the 4 criteria) definition. We assessed the correlation of PGA with (predominantly) inflammatory (TJC28, SJC28, CRP) and disease impact (pain and HAQ) factors. We used hierarchical modelling to

explain PGA by 4 blocks (B) of independent variables (B1: gender, age, disease duration; B2: biologic DMARD, Gross National Income; B3: pain, HAQ; and B4: TJC28, SJC28, CRP).

Results: Among the 18280 patients analysed, 1930 (10.6%) were in DAS28CRP4v remission, and 2197 (12.0%) in DAS28CRP3v remission. According to the Boolean definition, 1207 (6.6%) patients were in remission. PGA was the main obstacle to Boolean remission: 2090 (79.0%) of the 2645 near-remission patients (Table 1). A considerable proportion of patients with low inflammation perceived high PGA (Figure 1).

PGA correlated better with Pain ($r_p=.79$) and HAQ ($r_p=.55$) than with TJC28 ($r_p=.45$), SJC28 ($r_p=.36$) or CRP ($r_p=.25$).

In the entire dataset, 60.2% of PGA variance was explained by Pain and HAQ, 1.8% by B1 and B2 of covariates and only 1.3% by B4 (TJC28, SJC28, CRP) (Table 2). In near-remission patients, B4 did not contribute significantly to changes in the model.

Table 1. Remission and near-remission rates (n=18280)

Disease Activity	3v	4v
DAS28CRP ⁴ , n (%)		
Remission (≤ 1.9)	2197 (12.0)	1930 (10.6)
Low (≤ 2.2)	3855 (21.1)	3485 (19.1)
Moderate to High (>2.2)	1228 (66.9)	12865 (70.3)
ACR/EULAR Boolean, n (%)		
Remission		1207 (6.6)
Near-rem. PGA		2090 (11.4)
Near-rem. CRP		214 (1.2)
Near-rem. SJC28		165 (0.9)
Near-Rem. TJC28		176 (1.0)
Non-Remission		14428 (78.9)

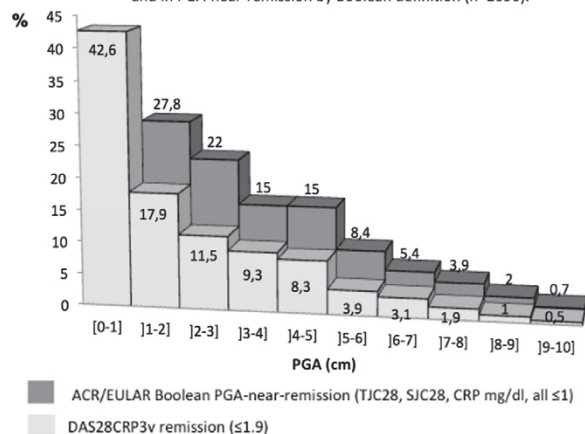
#Fleischmann 2015 (PMID:25143522).

Table 2. Hierarchical multivariable regression analysis to explain PGA

Model Block	All patients (n=6388)			Patients in Near-Remission (n=831)		
	Adj. R ²	R ² change	sig. F Change	Adj. R ²	R ² change	sig F Change
B1	0.008	0.008	<0.001	0.015	0.018	0.002
B2	0.018	0.010	<0.001	0.024	0.012	0.007
B3	0.620	0.602	<0.001	0.423	0.398	<0.001
B4	0.633	0.013	<0.001	0.426	0.004	0.092

Legend: B1 = Gender + Age + Dis. duration; B2 = B1 + Gross Nat. Income + bDMARD; B3 = B1 + B2 + Pain + HAQ; B4 = B1 + B2 + B3 + TJC28, SJC28, CRP.

Figure 1 - PGA distribution in patients in remission by DAS28CRP3v (n=2197) and in PGA-near-remission by Boolean definition (n=2090).



Conclusions: Two thirds of patients that achieve TJC28, SJC28, and CRP ≤ 1 still perceive high PGA despite disease "inflammatory" control. The weight of PGA in DAI could lead to immunosuppressive overtreatment. In these patients, disease impact management, including non-pharmacological treatments delivered by Health Care Professionals, are more likely to be effective.

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