AB0776 THE EFFECT OF PREGNANCY ON DISEASE ACTIVITY OUTCOMES IN PSORIATIC ARTHRITIS PATIENTS

M. Berman[1], D. Paran[1], D. Zisman[2], J. Wollman[1], D. Levartovsky[1], O. Elkayam[1]. [1]*Rheumatology, Tel Aviv Sourasky Medical Center, Tel Aviv;* [2]*Rheumatology, Carmel Medical Center, Haifa, Israel*

Background: Psoriatic arthritis often affects patients at a childbearing age. The relationship between pregnancy and psoriatic arthritis, in terms of pregnancy outcomes and its effect on disease activity, has not been well studied
Objectives: To evaluate the effect of pregnancy on disease activity in psoriatic arthritis
Methods: A retrospective review of files of female patients followed at Psoriatic arthritis clinic at the Tel Aviv Medical center was performed, patients with at least 1 pregnancy during follow up and one visit during or soon after pregnancy were included. A review of files was performed which included the following data: age, disease duration, pattern of PsA, disease activity before during and after pregnancy, record of treatment, including IA injections. Postpartum period was defined as up to 1 year after pregnancy. PsA activity was defined as follow: no disease activity (no active synovitis), mild disease (up to 1 joint involved), moderate to severe disease (more than 2 joints involved). The follow-up during and after pregnancy was classified as: improvement, worsening or stable
Results: 25 PsA women and 35 pregnancies were identified. 33 resulted in live healthy babies. One pregnancy was interrupted on week 23, so partial follow up was available. The mean age at pregnancy was 32.5 years. Table 1 summarizes status of disease activity before, throughout pregnancy and during the postpartum period in the whole group. No significant change in disease activity was noticed throughout pregnancy while significant proportion of patients flared at postpartum. Before 21 pregnancies patients were treated with biologic agents. In 15, biologic treatment was discontinued close to pregnancy or during the first trimester. In this group, 5 (33%) of patients were classified as mild to severe activity prior to pregnancy. This number increased up to 8 (53%), 7 (47%) and 14 (93%) during the 1st, 2nd trimester and postpartum period respectively. In 6 patients in whom biologics were continued beyond first trimester, no significant change in degree of disease activity was noticed. Interestingly, in the group of non-biologics treated patients, an improvement in disease activity was observed – the proportion of patients with mild to severe disease activity decreased from 85% close to pregnancy to 69% in the 1st and 2nd trimester and 58% in the 3rd one while an increase to 83% was observed after pregnancy. During 6 pregnancies, corticosteroids were initiated or the dosage increased- 83% in pregnancies where biologics were stopped before pregnancy.

Table 1. Disease activity during pregnancy

N (%)	Before	1st trimester	2ndtrimester	3rd trimester	Postpartum
No	15 (44%)	14 (41%)	13 (38%)	16 (48%)	6 (18%)
Mild	9 (26%)	10 (29%)	10 (29%)	9 (27%)	9 (27%)
Moderate to severe	10 (29%)	10 (29%)	11 (32%)	8 (24%)	18 (55%)

Conclusions: Patients with PsA definitively flare after pregnancy. Our results suggest that stopping treatment with biologic agents before pregnancy is associated with flare during pregnancy and the postpartum period. It seems that in terms of PsA disease activity, it may be recommended to continue treatment with biologic agents throughout pregnancy
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AB0777 CHARACTERISTICS OF AMYLOID A DEPOSITION IN PSORIATIC ARTHROPATHY AND IN RHEUMATOID ARTHRITIS – A COMPARATIVE POSTMORTEM CLINICOPATHOLOGIC STUDY OF 161 RHEUMATOID AND 12 PSORIATIC ARTHRITIS PATIENTS

M. Bély[1], Á. Apáthy[2]. [1]*Department of Pathology, Policlinic of the Order of the Brothers of Saint John of God;* [2]*Department of Rheumatology, St. Margaret Clinic Budapest, Budapest, Hungary*

Background: The aim of this study was to determine the prevalence and extent of amyloid A deposition on different tissue structures in various organs of rheumatoid arthritis (RA) and psoriatic arthritis (PsA) patients.
Methods: AAa was detected in 34 (21.1%) (females: 29, average age: 64.3 years, range: 83–32, onset of RA: 48.6, average disease duration: 15.7 years; males: 5, average age: 51.2 years at death, range: 88–19, onset of RA: 41.3, average disease duration: 14.8 years) of 161 RA, and in 2 (16%) female: 2, average age: 57.5 years, range: 63–52, onset of PsA: 47.5, average disease duration: 11.0 years) of 12 PsA patients.
RA and PsA were diagnosed clinically according to the criteria of the American College of Rheumatology (ACR) [1,2].
Amyloid deposits on different tissue structures [arteriole, small artery, medium size artery, venule, small vein, medium size vein, interstitial collagen fiber, reticulin fiber (collagen IV), basal laminas, nerve, renal glomerulus] of 6 organs [heart, lungs, liver, kidney, skin and brain] were determined histologically. The extent of amyloid A deposits was evaluated by semi-quantitative, visual estimation on a 0 to 3 plus scale, based on the number of involved tissue structures per light microscopic field [3].
The prevalence and extent of amyloid A deposits on different tissue structures were compared by Student (Welch) t-probe.
Results: The average prevalence (in %) and the average extent of amyloid A deposits (absolute value) on different tissue structures of analyzed 6 organs in RA and PsA patients are summarized in Table.

Tissue structure	RA-AAa Prevalence in %	PsA-AAa Prevalence in %	p<	RA-AAa Average extent	PsA-AAa Average extent	p<
Arteriole	61,33	58,33	**0,28**	1,34	1,33	**0,49**
Small artery	50,28	58,33	**0,46**	0,94	1,21	**0,25**
Collagen IV	30,39	**41,67**	**0,36**	0,56	**0,83**	**0,21**
Interstitial collagen	**45,86**	33,33	**0,22**	**0,78**	0,58	**0,24**
Small vein	26,52	33,33	**0,42**	0,39	0,42	**0,44**
Medium size vein	21,55	25,00	**0,47**	0,37	0,33	**0,43**
Medium size artery	24,86	25,00	**0,42**	0,34	0,25	**0,27**
Venule	22,10	16,67	**0,32**	0,32	0,25	**0,35**
Nerve	4,97	16,67	**0,17**	0,08	0,17	**0,24**
Average/Structure	**31,98**	**34,26**	**0,388**	**0,57**	**0,60**	**0,444**
Average/Patient	**32,27**	**36,21**	**0,244**	**0,585**	**0,668**	**0,198**

Conclusions: The difference between average prevalence ($p<0.388$) and average amount ($p<0.444$) of amyloid A deposits/structures in RA and PsA patients was not significant.
The prevalence and extent of amyloiod A deposits on different tissue structures of analyzed organs changed parallel in RA or PsA patients except for collagen IV and interstitial collagen.
The reverse prevalence and extent of amyloid A deposits on collagen IV and interstitial collagen fibers between RA or PsA patients may be due to structural (qualitative) changes of collagen IV resulting in its increased affinity of amyloid A in PsA patients. Qualitative change of collagens in systemic sclerosis patients has been demonstrated [4].
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AB0778 PATIENT AND PHYSICIAN GLOBAL ASSESSMENTS ARE POORLY CONNECTED IN INDIVIDUAL PATIENTS WITH PSORIATIC ARTHRITIS AND ONLY POORLY EXPLAINED BY OTHER CLINICAL MARKERS OF DISEASE ACTIVITY

E.M. Egsmose[1,2], O.R. Madsen[1,2]. [1]*Department of Rheumatology, Copenhagen University Hospital Rigshospitalet Gentofte, Hellerup;* [2]*The DANBIO registry, Copenhagen University Hospital Rigshospitalet Glostrup, Glostrup, Denmark*

Background: Assessment of disease activity is important in the evaluation and monitoring of patients with psoriatic arthritis (PsA) in clinical care and research. As there is no single “gold standard” variable for assessment of disease activity several markers of disease activity are used, among these “global assessment” by the patient (PaGl) and by the physician (PhGl). The agreement and interplay between PaGl and PhGl are not well clarified in patients with PsA, however.
Objectives: The objective of the study was to examine associations on the group level and agreements on the individual patient level between PaGl and PhGl as scored on visual analogue scales (VAS) in the daily clinic by patients with active PsA and their rheumatologists.
Methods: Traditional disease activity data on 76 PsA patients with active disease planned to initiate biological treatment were extracted from the Danish DANBIO registry. Data comprised swollen joint count (SJC), tender joint count (TJC), CRP, patient and physician global assessment (PaGl and PhGl) and pain (VAS), HAQ-DI and DAS28-CRP (4v). Parametric statistics was used. The predictability of PaGl and PhGl, respectively, by all other disease markers mentioned and by age and sex was examined using stepwise multiple regression analysis. Agreement between the VAS scores was expressed as the bias (mean difference between intra-individual scores) and the 95% lower and upper limits of agreement (LLoA;ULoA) according to the Bland-Altman method.
Results: Mean age was 52.2±11.1 years and mean DAS28-CRP 4.7±1.1. 59.2% were of the patients were women. Mean PaGl was 63.7±23.2 and PhGl 39.9±19.8 ($p<0.0001$). PaGl was significantly but weakly correlated with PhGl ($r=0.42$, $p<0.0001$) with a high standard error of estimation (SEE) =21.2. PaGl was independently predicted by pain (beta =0.76, $p<0.0001$) and HAQ-DI (beta =0.19, $p<0.01$) and was not predicted by PhGl (p=0.61) (R =0.78, SEE =10.5, $p<0.0001$). PhGl was independently predicted by SJC (beta =0.43, $p<0.0001$) followed by pain (beta =0.41, $p<0.0001$) and CRP (beta =0.20, $p<0.05$) (R =0.70, SEE =14.4, $p<0.0001$) with no significantly contribution by PaGl (p=0.49). Differences between the patient-reported VAS-scores were small on the group level but on the individual level they were pronounced: LLoA;ULoA [bias] for PaGl