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AB0575

FACTORS ASSOCIATED WITH PSORIATIC ARTHRITIS ACTIVITY IN CLINICAL PRACTICE

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Background: Psoriatic Arthritis (PsA) is a multifaceted disease with various clinical domains. A number of composite indices has been developed recently [1, 2]. DAPSA (Disease Activity in Psoriatic Arthritis) is the valid instrument for assessment of PsA activity focused on peripheral arthritis. But other factors can influence on PsA activity and haven't studied yet.

Objectives: to identify factors that are associated with PsA activity based on the data from RU-PsART cohort.

Methods: 117 (M/F=63(54%)/54(46%)) patients (pts) with active PsA fulfilling the CASPAR criteria mean age 44.3 ± 10.9 yrs, mean DAPSA 37.8±21.4, mean PsA duration 73.4±78.4 mo, mean PsO duration 213.4±152.5 mo, were included. Data was collected from 43 rheumatology centers of the Russian Federation. All pts underwent standard clinical examination of PsA activity at enrollment. DAPSA, ESR (mm/h), CRP (mg/L), dactylitis, enthesitis by LEI plus Plantar Fascia, BSA (%), HAQ-DI and fatigue by Fatigue Scale (V.4) FACIT (Functional Assessment of Chronic Illness Therapy), BMI (kg/m²) were evaluated. DAPSA > 28 indicate high activity. Multi-dimensional step-by-step discriminant analysis was used to identify a group of features that are associated with high PsA activity by DAPSA. M±SD, %, OR 95% (CI) were performed.

Results: The following features proved to be the most informative: LEI (p=0.739), tenderness of the Plantar Fascia (p=0.003), age (p=0.0004), FACIT (p=0.092), PsA duration >2 yrs (p=0.013), BSA>3% (p=0.021), Nail PsO (p=0.092), BMI (kg/m²) (p=0.22). The area under the ROC-curve (AUC) 0.768, 95% CI (0.624-0.913). Sensitivity/ Specificity of model 77.0%/ 69% accordingly (Figure 1).

Figure 1 ROC analysis of the Sensitivity and Specificity of the model.

Conclusion: Weight, enthesitis, skin and nail PsO severity, fatigue and PsA duration >2 yrs are associated with high PsA activity as well as articular symptoms.

New combination indices based on these features should be developed and validated in clinical practice.

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BONE EROSION IN PSORIATIC ARTHRITIS ASSOCIATED WITH PSORIASIS DURATION, SKIN, NAIL AND JOINT DISEASE SEVERITY

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Background: Psoriatic arthritis (PsA) is heterogeneous in its clinical presentation and disease course, but many patients (pts) develop a destructive form of arthritis. Psoriasis (PsO) precedes arthritis by an average of 7 years. [1]. Theory of transition from PsO to PsA has been proposed recently [2]. But association between skin disease severity and joint disease are still unclear.

Objectives: to evaluate association between bone erosion, PsO duration, skin and nail disease severity in PsA pts based on data from clinical practice (RU-PsART cohort).

Methods: 737 (M/F=350/387) PsA pts fulfilling the CASPAR criteria were included. Mean age 47.4±12.7 years (yrs), PsA duration 55[17;120] mos., PsO duration 165[74.5;292] mos., mean DAPSA 23.3[14;36.9] mos., HAQ-DI - 0.98 [0.5;1.38], CRP - 7.4 [2.1;18] mg/L. All pts underwent standard clinical examination (tender joints count (TJC)/68, swelling joints count (SJC)/66, CRP (mg/L), DAPSA, dactylitis, enthesitis by LEI + Plantar Fascia (PF), HAQ-DI. Mild disease was defined as body surface area (BSA)≤10%, moderate to severe as BSA>10%. The presence/absence of nail PsO was evaluated. X-ray of feet and hand were done in 622 out of 737 pts. The one-factor model of logistic regression was used to identify a group of features that are associated with achievement MDA. M±SD, Me [Q25; Q75], Min-Max, %, t-test, Pearson-χ², Mann-Whitney tests, ORs with 95% CI were performed. All p<0.05 were considered to indicate statistical significance.

Results: PsO precedes of PsA by an average of 9.2 years. BSA≤10% was found in 615 out of 672 pts (91.5%), BSA>10% - in 57 out of 672 pts (8.5%). Nail PsO were seen in 230 out of 737 (31.2%). Bone erosion was found in 237 out of 622 of pts (38.1%). Among these pts nail PsO were seen in 67 out of 237 pts (28.3%). Enthesitis found in 236 out of 737 pts (42.1%), dactylitis - in 197 out of 731 pts (27%), axial PsA - in 315 out of 731 pts (43.1%). Bone erosion significantly associated with PsO duration more than 5 yrs., skin and nail PsO severity, high PsA activity by DAPSA, axial manifestation and duration of PsA > 36 mos. (Figure 1).

Figure 1 Forest plot of factors associated with bone erosion in PsA pts.