a follow-up of 2-years. Final diagnosis was assessed at the end of study period defining two groups: RA progression (RA-group) vs no progression (non-RA-group). Baseline characteristics were recorded for both groups: sex, age, smoking habit, duration of symptoms, morning stiffness, tender joint count (TJC), swollen joint count (SJC), Rheumatoid Factor (RF), Anti-Citrullinated-Peptide-Antibodies (ACPA), DAS-28, erythrocyte sedimentation rate (ESR), C-Reactive Protein (CRP), Pain visual analogue scale (VAS). Differences in sociodemographic, clinical and serological features between groups were analyzed using T-test, chi-square test and U-Mann Whitney depending on the nature of variables.

Results: A total of 228 patients with UA were included, of which 54 (23.3%) progressed to RA (patients characteristics are shown in table 1). Regarding serological characterization, we found that in our cohort, 44.4% of patients who developed RA had FR and ACPA positivity, 13% RF positive, 7.4% ACPA positive. In contrast 35% patients were seronegative. From non-RA group, 73% of patients were seronegative, 18% RF positive, 4.5% ACPA positive and 4.5% double positive.

Table 1.

Variable	Total (n=228)	RA (n=54)	Non-RA (n=174)	p-value
Female sex n(%)	165 (71.7)	42 (77.8)	121 (69.5)	0.31*
Age (mean SD)	51.47 (16.46)	52.9 (16.15)	51.26 (16.61)	0.53 [§]
Smoking habit n (%)				0.12*
-smokers	49 (21.2)	14 (25.9)	33 (19)	
-ex-smokers	52 (22.5)	15 (27.8)	37 (21.3)	
-non-smokers	113 (48.9)	19 (35.2)	93 (53.4)	
Duration of symptoms (weeks) (median IQR)	8 (4-19)	12 (8-24)	8 (4-16)	0.006[¶]
Morning stiffness >60min n (%)	53 (22.9)	15 (27.8)	38 (21.8)	0.26*
Patient health assessment (median IQR)	39 (16-68)	58 (22-75)	34 (14-64)	0.01[¶]
Pain (VAS) (median IQR)	45 (18-68.2)	54 (30-71)	39 (14.5-67.5)	0.02[¶]
Tender Joint Count (median IQR)	2 (1-6)	4 (1-9)	2 (1-6)	0.04[¶]
Swollen Joint Count (median IQR)	2 (1-4)	3 (1-6)	2 (1-4)	0.01[¶]
Baseline DAS28 (mean SD)	3.97 (1.39)	4.44 (1.54)	3.82 (1.33)	0.006[§]
HAQ (median IQR)	0.75 (0.25-1.5)	1.12 (0.37-1.56)	0.62 (0.12-1.37)	0.06 [¶]
CRP (mean SD)	2.2 (8.01)	1.39 (3.25)	2.3 (8.9)	0.44 [§]
ESR (mean SD)	23.74 (19.5)	24.62 (16.22)	22.8 (19.3)	0.54 [§]
RF n (%)	70 (30.3)	31 (57.4)	39 (22.4)	<0.001*
ACPA n (%)	44 (19)	28 (51.9)	16 (9.2)	<0.001*

No differences between age at onset, sex and smoking habit were found. Duration of symptoms until first visit to Rheumatology Department was longer in RA-group. Regarding joint involvement, TJC and SJC were higher in RA-group at baseline and also VAS pain and patients' global health assessment.

Conclusion: One out of four patients diagnosed with early UA are at risk of RA development within the following 2 years. This fact implies that these patients benefit from EAC in order to have a tight control of the disease and have the chance of starting treatment as soon as possible.

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ACPA-STATUS AND RHEUMATOID ARTHRITIS: MUCH MORE TO BE REVEALED!

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Background: Anti-citrullinated protein antibodies (ACPA) are commonly associated with Rheumatoid arthritis (RA). RA is, therefore, classified as immunopositive or immunonegative, with disparate mechanisms in predisposition.

Objectives: Our study aimed to determine the baseline characteristics and differences of ACPA-positive and ACPA-negative RA.

Methods: We conducted a cross-sectional study including 224 patients with RA. All patients fulfilled the 2010 American College of Rheumatology/European League Against Rheumatism RA classification criteria. The patients were divided according to their ACPA status into two groups: ACPA-positive group (G1) and ACPA-negative group (G2). We compared clinical, radiological, and laboratory findings between the two groups, as well as extra-articular manifestations, comorbidities including fractures and osteoporosis. The Fracture Risk Assessment Tool (FRAX) was used to estimate the 10-year probability of major osteoporotic fracture (MOF) and also hip fracture (FH).

Results: Of the 224 patients, 31.6% were negative for ACPA (n=71). Female predominance was found in both groups with a sex ratio of 0.25 (p=0.203). ACPA-negative subjects were younger (57±11 versus 59±12 years) (p=0.305).

The initial presentation of RA was different between the two groups without reaching statistical significance. In the ACPA-negative group, alteration of general condition was more frequent (16.9% in G2 versus 13.7% in G1) (p=0.533), with a tendency to oligo-articular onset (18.5% in G2 versus 6.7% in G1) (p=0.737). ACPA-positivity was more associated with an acute start of symptoms (10.4% in G1 versus 8.4% in G2) (p=0.639).

There was no significant difference in the mean DAS28-VS (5.2±1.1 in G2 versus 5.5±1.3 in G1) and DAS28-CRP levels (5±1 in G2 versus 5.3±1.2 in G1) (p=0.069 and p=0.098 respectively).

ACPA-positive RA was, however, significantly associated with more structural joint damage: erosions (55.9±53 in G1 versus 78±36 in G2, p=0.01), joint space narrowing (50.4±45.5 in G1 versus 33.1±36.6 in G2, p=0.003), Sharp/van der Heijde radiographic score (126.6±103.2 in G1 versus 88.8±81.5 in G2, p=0.004). ACPA-positive RA patients had more atlantoaxial dislocation: 20.2% in G1 versus 7% in G2 (p=0.012). There was no significant difference in hip involvement (9.8% in G1 versus 14% in G2) (p=0.344).

There were no significant differences in extra-articular manifestations between the two groups: Rheumatoid nodules (10.4% in G1 versus 18.3% in G2) (p=0.891), Sjögren's syndrome (16.3% in G1 versus 16.9% in G2) (p=0.715), amyloidosis (0.6% in G1) (p=1), pulmonary fibrosis (5.8% in G1 versus 4.2% in G2) (p=0.757), neurological signs (4.5% in G1 versus 5.6% in G2) (p=0.733), anaemia (5.8% in G1 versus 1.4% in G2) (p=0.175).

When analyzing comorbidities, no significant differences were found: diabetes (10.4% in G1 versus 18.3% in G2) (p=0.103), cardiovascular diseases (19.6% in G1) (p=1), neurological diseases (0.06% in G1 versus 1.4% in G2) (p=0.534), dysthyroidism (2.6% in G1 versus 5.6% in G2) (p=0.267), dyslipidemia (3.2% in G1 versus 4.2% in G2) (p=0.711), cancer (1.3% in G1) (p=1). There were neither significant differences in the prevalence of fracture (21.5% in G1 versus 18.3% in G2) (p=0.574), and osteoporosis (23.6% in G1 versus 29.5% in G2) (p=0.347), between the two groups. However, ACPA-positive patients presented with a significantly higher FRAX score of MOF (2±2.8 in G1 versus 1.2±1 in G2) (p=0.006), and FRAX score of FH (0.9±1.8 in G1 versus 0.3±0.5 in G2) (p=0.003).

Conclusion: ACPA status appears to influence both the clinical presentation and radiological progression of RA patients. ACPA-positive patients present with an acute start of symptoms, with more structural damages and atlantoaxial dislocation. Comorbidities, including osteoporosis, does not seem affected by ACPA status. However, regardless of osteoporosis, ACPA-positivity is associated with a higher probability of major osteoporotic and hip fractures. Further research is needed to clarify this relationship.

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