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AB0269

COMPARISON BETWEEN DIFFERENT DISEASE ACTIVITY SCORES IN ELDERLY ONSET RHEUMATOID ARTHRITIS

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Background: Elderly onset rheumatoid arthritis (EORA) has several peculiarities. Which activity index should we use in this age group is still an unresolved issue. The use of ESR in DAS28 is widespread, but it is well known that ESR could increase with age, overestimating activity. DAS28-PCR or SDAI, which uses PCR, or CDAI that does not use analytical data, could be more suitable alternatives.

Objectives: To describe disease activity scores evolution in EORA and to analyse the correlation and concordance between them.

Methods: Longitudinal observational study in naïve treatment EORA patients (ACR/EULAR 2010 criteria). Study visits were carried out basally (pre-treatment) and at month 1, 3, 6 and 12. DAS28 VSG, DAS28 PCR, SDAI and CDAI were calculated at each visit, and ACR/EULAR remission index at 12 months. The same rheumatologist made all visits and explorations. Correlations were analysed using the Spearman or Pearson correlation index (p value ≤ 0.001). The concordance was evaluated with the kappa index. The statistical study was performed with Stata 15.1.

Results: 45 patients with EORA were enrolled. Table 1 and 2 summarize the clinical and analytical characteristics.

All the scores had a very good linear correlation both at baseline and at follow-up (correlation score: 0.83-0.98). A moderate concordance was observed from the baseline visit between DAS28-VSG and DAS28-PCR ($k=0.43-0.52$, $p < 0.001$), which decrease to low at 12 months ($k=0.32$, $p < 0.001$). A concordance of 100% was observed at baseline analysing DAS28-VSG and SDAI ($k=1$; $p < 0.001$), but worsened during follow-up being moderate ($k=0.40-0.56$; $p < 0.001$). A very good concordance was observed comparing DAS28-VSG to CDAI at the baseline visit ($k=0.88$, $p < 0.001$), which decreased to good-moderate during follow-up ($k=0.40-0.63$, $p < 0.001$). Between DAS28-PCR and SDAI a moderate concordance

N=45						
Epidemiological data						
Women n (%)	21 (46.7)					
Age (mean ± σ)	74.8 ± 7.5					
Symptoms n (%)						
Shoulder girdle	34 (75.6)					
Pelvic girdle	20 (44.4)					
Peripheral joints	45 (100)					
Oedema	21 (46.7)					
Small joints of hands	42 (93.3)					
Analytical and radiological data n (%)						
FR +	15 (33.3)					
ACPA +	13 (28.9)					
FR and ACPA +	10 (22.2)					
Bone erosions	4 (8.8)					
Treatments n (%)						
Glucocorticoids	43 (95.5)					
DMARDs	40 (91.1)					
	Baseline N = 45	Month 1 N=45	Month 3 N=44	Month 6 N=44	Month 12 N=44	% remission Month 12 N=44
DAS28-VSG (mean ±σ)	6.3 ± 1.0	2.9 ± 1.7	3.0 ± 1.4	2.8 ± 1.3	3.1 ± 1.3	40.9
DAS28-PCR (mean ±σ)	5.7 ± 1.0	2.5 ± 1.4	2.4 ± 1.3	2.2 ± 1.1	2.5 ± 1.0	70.4
SDAI (mean±σ)	41.0 ± 13.8	9.3 ± 11.1	7.9 ± 10.7	6.9 ± 8.7	7.5 ± 8.0	31.8
CDAI (mean±σ)	36.9 ± 11.6	8.7 ± 10.4	7.4 ± 10.5	6.4 ± 8.5	6.8 ± 7.9	31.8
ACR/EULAR remission	18.2					

was observed up to 6 months ($k=0.43-0.57$, $p < 0.001$), which worsened to low at 12 months ($k=0.32$, $p < 0.001$). The concordance between DAS28-PCR and CDAI was low-moderate ($k=0.26-0.48$, $p < 0.001$). On the other side, the agreement was very good between SDAI and CDAI throughout the follow-up ($k=0.86-0.93$, $p < 0.001$). The ACR/EULAR index had a very low concordance with DAS28-PCR ($k=0.17$, $p < 0.001$), moderate with DAS28-VSG ($k=0.49$, $p < 0.001$) and the results are good with SDAI and CDAI ($k=0.64$, $p < 0.001$).

Conclusion: The correlation between the different scores was good. However, the concordance between all the scores decreases as time passes, according to a higher percentage of patients in remission or low activity. This low-moderate concordance is demonstrated even between DAS28-PCR and DAS28-VSG, and when these are compared with CDAI and SDAI. CDAI and SDAI are the only ones that maintain a good concordance between them, even when the number of patients in remission or low activity increases. ACR/EULAR only maintains an acceptable concordance with the most restrictive scores, SDAI and CDAI. By contrast, agreement is very low with DAS28, especially by DAS-PCR.

Disclosure of Interests: None declared

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AB0270

POSITIVE ACPA WITHOUT EVIDENCE OF ARTHRITIS – A RARITY?

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Background: Rheumatoid Arthritis (RA) follows a variable disease course in regards to joint damage and functional outcome, therefore an early diagnosis is crucial for its management. However, occasionally, this diagnosis can be a challenge. Rheumatoid Factor (RF) and Anti-citrullinated peptide antibodies (ACPA) are the most useful biomarkers in the diagnosis of RA and, although individually they do not dictate the final diagnosis, they present high specificity and may be positive even before clinical manifestations of the disease occur.

ACPA is detected in approximately two thirds of the patients with RA and presents a superior diagnostic specificity when compared to RF. This specificity of 95-98% may present an increased value if it is three times superior to its value of reference.

Objectives: Share with the medical community and alerting them for the existence of patients with positive ACPA with no clinical evidence of RA.

Methods: By consulting the electronic clinical records of patients observed by a Rheumatologist, we identified and analyzed the patients that presented positive ACPA in their blood tests and no evidence of signs or symptoms of RA, during at least six years of follow-up. Patients with other rheumatic diseases, history of tuberculosis or chronic pulmonary diseases were excluded.

Results: We identified seven patients (average of 61 years old) with positive ACPA in at least two different blood tests, of which five presented a value three times superior to its normal value (<15 U/mL). It should be noted that, four patients presented both positive ACPA and RF. Clinically, all patients referred mechanical symptoms that varied between cervical, low back, shoulder and knee pain and did not present any record of swollen joints without trauma. Radiologically, in most cases we observed joint degenerative damage. Six years after the first positive ACPA, none of the patients developed any manifestation of inflammatory joint disease.

Conclusion: Studies reveal that positive ACPA in healthy patients may precede the clinical diagnosis of RA. The specificity of positive ACPA and RF one and a half years before the diagnosis of RA is approximately 99-100%. However, as we demonstrated, it is not uncommon to find during clinical practice individuals with positive ACPA without evidence of arthritis, which leads us to emphasize the importance of a detailed anamnesis with a meticulous physical examination before establishing a diagnosis based on the patient's blood tests.

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