In AS, CEC improved significantly during anti-TNF therapy, probably due to increase in anti-atherogenic HDL. Despite the LDL increase associated with the anti-TNF therapy in AS patients, CLC stayed constant, standing against a hypothetical pro-atherogenic effect of such LDL increase.
These data may be useful for atherosclerosis prevention and treatment with tailored strategies for AS and PsA patients.
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AB0731 OVERCOMING THE PROBLEMS OF UNTRANSLATABILITY: A MOBILE PHONE APPLICATION IN THE EXAMPLE OF TURKISH VERSION OF BASDAI

Y. Özmen[1], E. Mammadov[1], Y. Yalçınkaya[1], A.U. Ünal[1], Z. Ertürk[1], Ü.G. Gazel[1], S. Kaymaz[1], A. Aksoy[1], F. Alibaz-Öner[1], N. İnanç[1], H. Direskeneli[1], A. Gökduman[2], P. Atagündüz[1]. *[1]Rheumatology, Marmara University Faculty of Medicine, Istanbil; [2]Pleksus Information Technologies Inc., Ankara, Turkey*

Background: Patient-reported outcomes (PROs) are important in monitoring and making treatment decisions.Recently,we reported that the translation of"tender points" in the fourth question of the Turkish version of BASDAI was not correctly understood,and replacing this question with an entheses examination (BASDAI-Q4) decreased the score (∆BASDAI:0.99,p<0.0001,95% CI0.54–1.44).[1]
Objectives: We report here the results of an investigator initiated clinical trial using a self-developed mobile phone application (MPA)[2] to overcome the problem of untranslability.
Methods: Out of 135 invited 95 axSpA patients participated.Initially,BASDAI self-report forms (BSRF) were administered.Thereafter,patients were randomized into two groups (2:1).GroupA completed a second set of BSRF after using the MPA with embedded videos defining terms and grading for each domain.GroupB completed a second set of BSRF under guidance of an inexperienced family physician (FP).A third set of BSRFs were completed by GroupB with the same FP after he went through the MPA.Afterwards,an entheses examination (EE) was performed by a blinded rheumatolgist and patients graded enthesis pain between 0–10.StandartQ4 was replaced with the EE scoring (BASDAI-Q4).Patients older than 45 years of age were excluded.
Results: Fifththree male (%55.7) and 42 female (%44.3)patients,with a mean disease duration of 13 years (SD=8.7)were studied.Sixtyfour and 31 patients were randomized to Groups A and B, respectively.Nine patients reported the Q4 as"not understood".32 patients had no enthesitis on EE,but of those only 21 scored"0" for Q4 during the unassisted-PRO.Eleven reporting no enthesitis had so on EE.In GroupA,out of six"not understood" responders forQ4,five reported enthesitis after MPA assistance and four had enthesitis at the final EE.Nineteen patients had no enthesitis on physical examination,but of those only 12 scored"0" for Q4 during the unassisted PRO,and an additional nine scored"0" forQ4 after MPA assistance.Six out of seven patients reporting no enthesitis,but with enthesitis on EE reported,enthesitis after MPA assistance.In GroupB,scoring forQ4 was similar after both the unassisted- and FP's first assistance PRO.Out of four "not understood" responders for Q4,two reported enthesitis after the second assistance of FP and both had enthesitis at the final EE.Six patients had no enthesitis on EE,but of those only4 scored"0" for Q4 during the unassisted-PRO,and an additional two scored"0" for Q4 after second FP-assistance.Two out of four patients reporting no enthesitis,but with enthesitis on EE,reported enthesitis after second FP-assistance.Mean BASDAI was significantly higher in both groups then BASDAI-Q4 (Group A=3.97±1.95 vs. 2.84±1.98, p<0.0001,95% CI0.58–1.52, Group B=3.81±2.05 vs. 2.98±2.25, p<0.0001,95% CI0.48–1.31). In both groups, MPA for both, patients and FPs resulted in more reliable overall BASDAI scores with BASDAI-Q4 as the gold standard (Group A=3.05±2.25 vs. 2.84±1.98, p=0.081, 95% CI0.71–1.45, Group B=3.21±1.87 vs 2.98±2.25, p=0.075,95% CI0.71–1.63).
Conclusions: Mobile applications may improve the quality of collected data in cases of untranslability even in previously validated PROs.
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AB0732 SPONDYLOARTHRITIS IN THE DEMOCRATIC REPUBLIC OF CONGO

P. Lebughe[1], K. de Vlam[2], R. Westhovens[3], J.-M. Mbuyi-Muamba[1], J.-J. Malemba[1]. *[1]Rheumatology, University Hospital of Kinshasa, Kinshasa, Congo, The Democratic Republic of the; [2]Rheumatology; [3]Department of Development and Regeneration, Skeletal Biology and Engineering Research Center, Division of Rheumatology, University Hospitals Leuven, Leuven, Belgium*

Background: While spondyloarthritis (SpA) is intensively studied in the Western world, data are scarce in sub-Saharan Africa.
Objectives: To determine the spectrum of SpA in outpatients with rheumatological complaints attending two rheumatology practices in Kinshasa, Democratic Republic of Congo.
Methods: A descriptive cross-sectional study over six months (December 1st, 2012 till May 31th, 2013) in consecutive patients attending the two rheumatology practices of Kinshasa; diagnosis was based on Amor or the ESSG criteria, and a clinical evaluation by a rheumatologist. Sacroiliac joint radiographic lesions were scored with the modified New York criteria. BASDAI and BASFI were evaluated in axial SpA.
Results: One hundred five patients (10.7%) were diagnosed among 984 rheumatologic outpatients with a sex ratio (male to female) of 1.4. The average age at the onset of the disease was 41.3±12.4 years. Non-radiographical axial spondyloarthritis was the most frequent subtype (4.98%) followed by reactive arthritis (4.27%). Other subtypes were: ankylosing spondylitis (1.02%), psoriatic arthritis (0.1%), SAPHO syndrome (0.1%) and IBD associated arthritis (0.1%). Mean BASDAI and BASFI in axial SpA were 42.7/100 and 46.4/100 respectively. Peripheral enthesitis was found in 43% of SpA patients and uveitis (10.4%) was the most frequent extra-articular manifestation. We did not detect any family history. Median erythrocyte sedimentation rate and C reactive protein were 37 (range: 7–110) mm/h and 22 (range: 4–48) mg/l respectively.

Subtypes of SpA	*N* (Rf)	Sex distribution			P	Mean age (years) ±SD
		M	F	Ratio		
Nr-axSpA	49 (46.7)	27	22	1:0.8	0.23	40.5±7.5
ReA	42 (40.0)	20	22	1:1.1	0.47	40.2±13.1
AS	10 (9.5)	6	4	1:0.7	0.45	46.2±4.7
PsA	1 (0.95)	0	1			32
SAPHO Syndrome	1 (0.95)	1	0			35
Enteropathic arthritis	1 (0.95)	0	1			25
Juvenile SpA	1 (0.95)	1	0			13

Conclusions: This hospital-based study suggests a substantial occurrence of some subtypes of SpA in central Africa. A population-based study is needed.
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AB0733 ASSOCIATIONS OF SERUM OSTEOPROTEGERIN AND IL-18 CONCENTRATIONS WITH CARDIOVASCULAR RISK IN ANKYLOSING SPONDYLITIS AND PSORIATIC ARTHRITIS PATIENTS

E. Kontny[1], K. Bonek[2], P. Gluszko[2]. *[1]Department of Pathophysiology and Immunology; [2]Department of Rheumatology, National Institute of Geriatrics, Rheumatology and Rehabilitation, Warszawa, Poland*

Background: Inflammatory spondyloarthropathies (SpAs), ankylosing spondylitis (AS) and psoriatic arthritis (PsA) are associated with cardiovascular (CV) disorders. In both diseases cytokines of IL-17/IL-23 axis are thought to play a pathogenic role. PsA, but not AS, is usually preceded by psoriasis, suggesting contribution of skin inflammation-related cytokines to disease manifestation and CV risk.
Objectives: To search in AS and PsA patients for the association between CV risk and serum concentrations of select cytokines, i.e. of IL-17/IL-23 axis, IL-18 and osteoprotegerin (OPG) related to skin inflammation and/or cardiovascular disease (CVD) pathogenesis, respectively.
Methods: Twenty patients with AS (15M/5F) and 18 patients with PsA (10M/8F) of similar age (mean±SD, 42±7 vs 46±10 years) and disease duration (6.5±10 vs 6.1±7 years) were evaluated. A group of 38 sex and age-matched healthy volunteers was used as a control. Routine laboratory tests, i.a. measurement of serum C-reactive protein (CRP) concentrations were performed. Clinical data, including evaluation of disease activity by $ASDAS_{CRP}$ and BASDAI indices, calculation of SCORE (Systemic Coronary Risk Evaluation) index and atherogenic index (AI=total cholesterol/HDL) were collected. Serum concentrations of IL-17AF, IL-21, IL-23, IL-27, IL-18 and OPG were measured by specific commercially available enzyme-linked immunosorbent assays (ELISA) and were expressed in pg/ml. The Mann-Whitney U-test was applied for intergroup comparison, and correlation was assessed using a Spearman's Rank two-tailed test (*R* value is shown).
Results: Compared with control, total group of SpAs patients was characterized by significantly elevated serum concentrations of OPG (1757±852 vs 1062±406 pg/ml), IL-18 (273±235 vs 164±195 pg/ml) and IL-21 (68±127 vs 20±49 pg/ml). Interestingly, while up-regulation of OPG (1517±387) and IL-18 (324±291)