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Disclosure of Interest: None declared

DOI: 10.1136/annrheumdis-2017-eular.4490

AB0998 **DIAGNOSTIC VALUE OF 14-3-3 η (ETA) IN RHEUMATOID ARTHRITIS**

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Background: Protein 14-3-3 η (eta) involved in the upregulation of inflammatory and joint damage factors [1]. 14-3-3 η is the candidate biomarker of rheumatoid arthritis (RA) [2].

Objectives: To evaluate the clinical utility of 14-3-3 η for diagnosis of RA.

Methods: We studied 44 patients (pts) with RA, 5 man and 39 women, median (25–75 percentile) of age 45 (33–59) years; disease duration is 10 (5–20) months, DAS28 5,2 (4,4–6,2); 5 pts with systemic lupus erythematosus, 4 – ankylosing spondylitis, 5 – OVERLAP, 4 with psoriatic arthritis and 20 healthy individuals. 14-3-3 η , anti-cyclic citrullinated peptide autoantibody (anti-CCP) was measured in serum by commercial enzyme-linked immunosorbent assays, IgM rheumatoid factor (IgM RF) measured – by immunonephelometry.

Results: The diagnostic sensitivity of 14-3-3 η for RA (cut off 0,19 ng/ml) is 70,5%, specificity – 83,7%; positive likelihood ratio – 4,33, negative likelihood ratio – 0,35; positive predictive value – 81,6%, negative predictive value – 73,5%; AUC – 0,78 (CI 0,68–0,88). Concomitant presence of 14-3-3 η and IgM RF, anti-CCP was determined in 68%, 73% of the patients with RA respectively. 14-3-3 η had correlation with IgM RF ($r=0,7$, $p<0,05$).

Conclusions: Serum 14-3-3 η are helpful for the diagnosis of RA.

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Disclosure of Interest: None declared

DOI: 10.1136/annrheumdis-2017-eular.3997

AB0999 **FINNISH COHORT OF PATIENTS WITH RAYNAUD'S PHENOMENON-NAIFOLD VIDEOCAPILLAROSCOPY FINDINGS AND AUTOANTIBODY VALUES**

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Background: Raynaud's phenomenon (RP) is very common all around the world, especially in cold climates (from 3 to 22%) (1). Nailfold capillaroscopy and autoantibodies have a pivotal role in diagnosing of different diseases in the context of RP (2). This is a first study of patients with RP in Finnish tertiary care hospitals.

Objectives: Aim is to investigate nailfold videocapillaroscopy (NVC) findings and autoantibody-values in patients with Raynaud's phenomenon first time in Finnish prospective multicenter study cohort.

Methods: We enrolled consecutive 160 patients with Raynaud's phenomenon who underwent NVC 9/2012–4/2013. Nailfold capillaries of II-V fingers of both hands were examined by using an optical probe videocapillaroscope mounted with x200 magnification lens. Images were analyzed with Videocapt software (DS Medigroup, Milan, Italy). NVC findings were classified with qualitative scoring, and early, active and late patterns were classified as "scleroderma pattern". Serum levels of antinuclear antibodies (ANA), antitopoisomerase I antibodies (anti-Scl-70) and anticentromere antibodies (ACA) were analyzed. Clinical and epidemiological features were reviewed.

Results: The mean age of the patients was 50, 4 years (± 14 , 8 SD), range 19–81 years, and 79, 4% were female. 15, 6% of patients were smokers and 3 had diabetes. Reasons for performing of NVC can be divided into three categories: (i) assessment of disease activity in previously diagnosed scleroderma (n=26), (ii) differential diagnosis of Raynaud's phenomenon (n=98), and (iii) assessment of Raynaud's phenomenon in other rheumatic diseases (n=36).

In group ii mean age was 48, 6 years (± 14 , 6 SD), 77, 6% were female and 17,3% were smokers. In this group 26, 5% (n=26) were diagnosed with scleroderma or there was strong suspicion of scleroderma at the first consultation of this study, 52% (n=51) were diagnosed with primary Raynaud's phenomenon and 21, 5% (n=21) were diagnosed with some other rheumatic disease (MCTD (n=2), Sjögren's syndrome (n=3), SLE (n=4), UCTD (n=8) and rheumatic arthritis (n=4)). Among those patients who was diagnosed with scleroderma, only 4% (n=1) had normal NVC pattern, 76,0% had scleroderma pattern (n=19) and 20,0% (n=5) had other non-specific changes. 19,2% (n=5) had low titers of ANA, 7,7% (n=2) had

medium titers of ANA and 76,0% (n=19) had high titers of ANA. 69, 2% (n=18) had anticentromere antibodies (ACA) and 3, 8% (n=1) had antitopoisomerase I antibodies (anti-Scl-70). Those patients who had positive ACA or anti-Scl-70 also had a NVC scleroderma-pattern.

Conclusions: The main reason for NVC in this cohort was differential diagnosis of Raynaud's phenomenon, and in most patients in diagnostic group primary Raynaud's phenomenon was diagnosed. NVC is useful method for differential diagnosis of Raynaud's phenomenon.

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Disclosure of Interest: None declared

DOI: 10.1136/annrheumdis-2017-eular.1431

AB1000 **EVALUATION OF NEUROPATHIC FOOT AND ANKLE PAIN IN RHEUMATOID ARTHRITIS PATIENTS: ELECTROPHYSIOLOGICAL AND ULTRASOUND STUDIES**

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Background: The majority of rheumatoid arthritis (RA) patients develop symptoms related to their foot or ankle.¹ Extraarticular manifestations occur in 10–20% of patients. Symptoms of neuropathy may be overlooked or overestimated in case of severe joint disease, restriction, pain and deformities.²

Objectives: This study aimed to evaluate neuropathic foot and ankle pain in RA patients using electrophysiology and musculoskeletal ultrasound (MSUS) to address the association between these findings and disease activity.

Methods: Fifty patients fulfilling the 2010 ACR/EULAR classification criteria and having neuropathic foot and/or ankle pain, were recruited. According to DAS28 system, patients were divided into two equal groups (25 patients each); active and remission. Twenty five healthy subjects were included as controls. Routine tibial and peroneal nerve conduction studies, as well as electromyography of tibialis anterior and abductor hallucis muscles, were performed.^{3,4} MSUS assessment of the ankle joint and extra-articular portion of the foot was also performed.⁵

Results: Thirty nine (78%) patients showed the electrophysiological findings of foot neuropathy, irrespective of the disease activity level. In total, 48% of the patients had demyelinating mononeuropathies (entrapment neuropathies), whereas the other 30% had symmetrical axonal neuropathies (Table 1).

Table 1. Electrophysiological Findings (n=50)

	N (%)
Posterior tibial entrapment at ankle	10 (20%)
Peroneal entrapment at fibular neck	6 (12%)
Combined entrapments of posterior tibial nerve at ankle & peroneal nerve at fibular neck	8 (16%)
Pure sensory axonal neuropathy	12 (24%)
Sensorimotor axonal neuropathy	3 (6%)

Ultrasound diagnosis of posterior tibial entrapment at the ankle was encountered in 20 (40%) patients. In addition, a positive power Doppler (PD) signal and

Figure (1): Distribution of power Doppler signals and erosions among patients (n=50)

