POS1388 ULTRASOUND FOR PANNICULITIS

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Background: Ultrasound (US) is a non-invasive and safe imaging method that allows in vivo differentiation of the morphological structures of subcutaneous fat (SCF) tissue in normal and pathology.

Objectives: Reveal features of ultrasound changes in SCF in panniculitis (Pn).
Methods: 57 patients (f – 45, m – 12) aged 18 – 67 years with an initial diagnosis of erythema nodosum and a disease duration of 3.6 ± 1.4 years were examined. In addition to the general clinical examination, a computed tomography of the chest organs and a pathomorphological examination of a skin biopsy from the site of the node were performed. Ultrasound was performed on a MyLabTwice apparatus (ESAOTE, Italy) using a multi-frequency linear transducer (10-18 MHz) with the PD technique, the parameters of which were adapted for recording low-speed flows (PRF 300-600 Hz, low filter, dynamic range – 20-40 dB), the presence of vascularization was assessed not only in the affected area, but also on the contralateral side using high-energy Doppler.

Results: 33 patients were diagnosed with septal Pn (SPn), 24 – lobular Pn (LPn). In all cases, the diagnosis was verified by histological examination. Ultrasound made it possible to assess the thickness, echoicity and vascularization of the SCF. In 35 patients, significant thickening of the SCF was revealed (as compared to the contralateral side), of which in 14 cases with SPn, in 21 – with LPn. Significant diffuse thickening of the SCF with the contralateral side was observed in 18 patients, incl. in 12 (66%) patients with LPn. Limited thickening was more typical for SPn (73%). A significant increase in the echoicity of the SCF was noted in all forms of Pn. A “lobular” echo pattern with an anechogenic environment was observed in 25 patients, of which 18 (72%) had LPn. An increase in vascularization compared to the contralateral side was recorded in 30 cases (SPn-17, LPn-13).

Conclusion: The obtained preliminary results indicate the important role of ultrasound in assessing the depth and prevalence of the inflammatory process at Pn. To clarify the diagnostic value of this method, further studies are needed on a larger sample of patients.

Disclosure of Interests: None declared

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POS1389 IDIOPATHIC, RHEUMATOID ARTHRITIS AND DIABETES MELLITUS ASSOCIATED CARPAL TUNNEL SYNDROME: EVALUATION OF THE DEPTH OF THE CARPAL TUNNEL BY ULTRASONOGRAPHY

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Background: The depth of the carpal tunnel is a relatively new sonographic parameter for evaluation of carpal tunnel syndrome (CTS). It showed a sensitivity and specificity comparable to cross-sectional area measurement. So far it is not clear how the depth can change with different types of CTS [1, 2].

Objectives: is to assess the depth in 3 different types of CTS including idiopathic, rheumatoid arthritis, and diabetes mellitus associated CTS and to compare it with other sonographic and electro-physiologic scales.

Methods: We included a total number of 360 participants; including 289 with CTS (60 idiopathic, 106 diabetes associated, and 123 rheumatoid arthritis associated CTS), all fulfilled the criteria for electro-physiologic diagnosis according to the American Association of Electro Diagnostic Medicine; along with 71 non-CTS cases (20 healthy controls, 20 RA and 31 diabetic patients). Median nerve cross-sectional area (CSA); flattening ratio (FR); and depth of the carpal tunnel (DCT) were measured for all participants.

Results: We found the mean age 35.6 ± 9.48 years. The female-to-male ratio was 47:13. The sensitivities for CSA, FR and DCT were 74.7%, 68.9%, and 75.1%; respectively, and the specificities were 91.6%, 63.4% and 87.3%; respectively. DCT was the best sonographic parameter with rheumatoid arthritis associated CTS (giving an accuracy of 88.6%) and CSA was the best in the other two types (giving an accuracy of 87.5% for idiopathic CTS and 83.4% for diabetes associated CTS). Table 1 summarizes the sensitivity statistics among each of the three groups and all over the study participants.

Conclusion: The depth of the CTS showed the best accuracy in rheumatoid arthritis associated CTS followed by idiopathic CTS and finally diabetes mellitus associated CTS.

REFERENCES:

- [1] Elsaman AM, Thabit MN, Radwan AR, Ohrndorf S. Idiopathic Carpal Tunnel Syndrome: Evaluation of the Depth of the Carpal Tunnel by Ultrasonography. *Ultrasound in medicine & biology* 2015; 41: 2827-35.
- [2] AM E, Hamed A, Borai A, Radwan A. Carpal tunnel syndrome in rheumatoid arthritis patients: evaluation of the depth by ultrasonography.

- [3] Elsaman AM, Thabit MN, Radwan AR, Ohrndorf S. Idiopathic Carpal Tunnel Syndrome: Evaluation of the Depth of the Carpal Tunnel by Ultrasonography. *Ultrasound in medicine & biology* 2015; 41: 2827-35.

Table 1. Sensitivity statistics for different US measures for CTS

		Idiopathic	RA	Diabetic	All
Number of the CTS cases		60	123	106	289
Number of the controls		20	20	31	71
CSA	Sensitivity	80%	70.7%	76.4%	74.7%
	Specificity	95%	90%	90.3%	91.6%
	Accuracy	87.5%	80.4%	83.4%	83.1%
FR	Sensitivity	75%	61.8%	73.6%	68.9%
	Specificity	60%	65%	64.5%	63.4%
	Accuracy	67.5%	63.4%	69.1%	66.1%
DCT	Sensitivity	75%	82.1%	67%	75.1%
	Specificity	85%	95%	83.9%	87.3%
	Accuracy	80%	88.6%	75.4%	81.2%

CSA: cross sectional area, FR: flattening ratio, DCT: Depth of the carpal tunnel

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POS1390 COMPARISON OF CAROTID SUBCLINICAL ATHEROSCLEROSIS AND STRUCTURAL DAMAGE IN AXIAL SPONDYLITIS WITH AND WITHOUT CONCOMITANT ANTERIOR UVEITIS. A MULTICENTER STUDY WITH 886 PATIENTS

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Background: Anterior uveitis (AU) is one of the most frequent extra articular manifestations of axial spondyloarthritis (axSpA), present in around 25% of patients. As with axSpA, AU has also been associated with the development of accelerated atherosclerosis¹. If the presence of AU confers an increased cardiovascular (CV) risk or specific disease-related features to patients with axSpA remains unclear.

Objectives: To compare the atherosclerotic burden, CV events, CV risk factors and disease related factors including structural damage in axSpA patients with and without AU.

Methods: Cross-sectional analysis of the AthesPain cohort, a Spanish multicenter cohort designed for the study of atherosclerosis in axSpA, comparing axSpA patients with and without concomitant uveitis. Background information on CV and disease-related factors was reviewed. Data on CV risk and disease status at the time of the study were also obtained, including the structural damage assessed by the presence of syndesmophytes, the severity of the sacroiliitis (defined as grade 3 or 4 according to New York criteria), and the modified Stoke Ankylosing Spondylitis Spinal Score (mSASSS). Carotid ultrasound (US) was performed in all patients at the time of the study, including measurement of carotid intima-media wall thickness (cIMT) and plaque detection according to the Mannheim consensus criteria.

Results: A set of 886 axSpA patients were included. 709 (80.0%) of them had no history of concomitant AU, which was present in the remaining 177 (20.0%). The group with AU was older (50 ± 11 vs 48 ± 13 years, $p=0.05$), had a higher proportion of patients with AS (90.1% vs 76.3%, $p=0.00$) (Table 1) and a longer disease duration (13(7-23) vs 7(2-16) years, $p=0.00$). The prevalence of HLA-B27 was higher in AU patients (82% vs 67%).

Remarkably, structural damage showed interesting differences between both groups (Table 1). AU patients had a higher prevalence of severe sacroiliitis (69% vs 49%, $p=0.00$), which remained significant after adjustment for age, disease duration and AS/nr-axSpA ratio. Furthermore, a non-significant trend towards a