AB0454

CHARACTERISTIC ULTRASOUND FEATURES OF SALIVARY GLAND LYMPHOMA IN PATIENTS WITH PRIMARY SJÖGREN'S SYNDROME

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Background: Lymphoma was one of the most severe complications of primary Sjögren's syndrome (pSS). Lymphomas often developed in organs where pSS is active, such as salivary glands. The enlargement of salivary glands is considered a predictive factor in previous studies. It is clarified that salivary gland ultrasound can visually and clearly demonstrate the parenchyma structure, which is a feasible method for SS diagnosis. However, there are no specific ultrasound features of salivary gland lymphoma and no early ultrasonic alarming system have been reported.

Objectives: To describe the characteristic ultrasound features and assess ultrasonic alarming value of salivary gland lymphoma in patients with pSS.

Methods: We followed a cohort of 63 patients with pSS from March 2017 to September 2019 and salivary gland ultrasound was performed every three months. All patients were examined by grey-scale and color Doppler ultrasound (US). The size, echotexture and vascularity of salivary glands were analyzed. US-guided core-needle biopsy (US-CNB) was used for the diagnosis of salivary gland lymphoma.

Results: In 63 patients with pSS, parotid enlargement occurred in 11 patients and none of them had submandibular gland enlargement. During the follow-up, 2 patients with parotid enlargement demonstrated recovery of size and echotexture improved. The remaining 9 patients had permanent parotid swelling and echotexture unchanged. US-CNB was performed in these 9 patients and histological and immunohistochemical findings of the cores suggested parotid lymphoma. Compared with other patients, these 9 patients revealed marked, permanent parotid enlargement of the unilateral or bilateral or asymmetric parotid. The parotid lymphoma ultrasonography was characterized by multiple, relatively large, well-demarcated hypoechoic (>6mm) with increased vascularity.

Conclusion: Ultrasonographic assessment of salivary gland helped to alarm the occurrence of lymphoma in pSS patients. Marked, permanent and asymmetric parotid enlargement with multiple, relatively large, well-demarcated hypoechoic in echotexture seemed to be characteristic for parotid lymphoma in pSS patients.

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Disclosure of Interests: None declared

DOI: 10.1136/annrheumdis-2020-eular.5193

AB0455

HEMATOLOGICAL PARAMETERS AS THE MARKERS OF DISEASE ACTIVITY IN PATIENTS WITH SYSTEMIC LUPUS ERYTHEMATOSUS

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Background: As the standard markers of systemic inflammation in autoimmune diseases erythrocyte sedimentation rate (ESR) and C-reactive protein (CRP) are usually used, but in recent years there have been conflicting results about the potential significance of neutrophil to lymphocyte ratio (NLR) and platelet to lymphocyte ratio (PLR).

Objectives: Our aim was to investigate the correlation of NLR and PLR with disease activity in patients with systemic lupus erythematosus (SLE).

Methods: The study involved 160 patients with SLE (145 women and 15 men), hospitalized in the Clinic of Rheumatology, Institute "Niška Banja", aged on the average 46.34 ± 10.82 years and with average disease duration of 9.76 ± 8.27 years, in whom the diagnosis was established based on the revised ACR criteria from 1997. In addition to clinical examination and supplementary tests, their disease activity was assessed using the *Systemic Lupus Erythematosus Disease Activity Index* (SLEDAI), together with determination of NLR and PLR.

Results: In SLE patients, there was a positive correlation of NLR with ESR ($r=0.212$; $p=0.010$), anti-dsDNA antibodies ($r=0.185$; $p=0.025$), and PLR ($r=0.601$; $p<0.001$), as well as a negative correlation with complement component 3 (C3) ($r=-0.264$; $p=0.003$). Further, there was a positive correlation of PLR with ESR ($r=0.329$; $p<0.001$), CRP ($r=0.249$; $p=0.003$), anti-dsDNA antibodies ($r=0.280$; $p=0.001$), anti-nucleosome antibodies ($r=0.263$; $p=0.026$), and values of urinary chemoattractant protein-1 (MCP1) ($r=0.263$; $p=0.043$), as well as a negative correlation with C3 ($r=-0.276$; $p=0.002$). Our univariate analysis demonstrated that not only the values of ESR, CRP, C3, anti-dsDNA, anti-nucleosome, anti-C1q antibodies, serum and urinary MCP1 ($p<0.001$) were statistically significantly associated with SLEDAI, but also the NLR ($p<0.001$) and PLR ($p<0.001$). Using the method of standard multiple regression analysis, we examined the impact of the above parameters on SLEDAI. The examined model accounted for 21.7% of variance in activity index (corrected $r^2=0.217$, $F=2.525$, $p=0.017$). As the statistically significant risk factors, ESR (Beta=0.394, $p=0.020$) and serum MCP1 (Beta=0.325, $p=0.043$) stood out.

Conclusion: NLR and PLR, as hematological parameters available in everyday clinical work, can be significant for disease activity assessment in SLE patients.

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Disclosure of Interests: None declared

DOI: 10.1136/annrheumdis-2020-eular.2501

Vasculitis

AB0456

ROLE OF CYTOKINES (INTERLEUKIN 17 AND 23) IN PSYCHIATRIC COMORBIDITIES ASSOCIATED WITH BEHÇET'S DISEASE

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Background: Behçet's disease (BD) is a chronic multi-systemic autoinflammatory disease associated with increase prevalence of psychiatric comorbidity (Ilhan et al. 2016). Pro-inflammatory cytokines have been reported to be elevated in patients with depression and anxiety. IL-23/IL-17 axis has been shown to play a remarkable role in pathogenesis of BD, depression and anxiety (Sugita et al. 2012, Gheita et al. 2015). However, the relation between the serum level of interleukin (IL)-17 and IL-23 and incidence of cognitive impairment, depression and anxiety in Behçet patients are still unknown.

Objectives: To evaluate the serum levels of IL-17 and IL-23 in Egyptian patients with BD and evaluate the correlations between the level of inflammatory cytokines and psychiatric manifestations as cognitive impairment, depression and anxiety.

Methods: Study design and recruitment

In a case control study, we recruited 45 BD patients, who fulfilled the modified International Criteria for Behçet's Disease (ITR-ICBD 2014) from the Rheumatology and Rehabilitation Department, Assiut University hospital. Thirty apparently healthy sex and age matched subjects were recruited, served as controls. This study was approved by the Ethical Committee of the Assiut University, Egypt. Informed consent was obtained from all participants.

Study methodology

All patients and controls were assessed for cognitive impairment, depression and anxiety using memory assessment scale, Hamilton depression rating scale and Hamilton anxiety rating scale respectively.

Serum level of proinflammatory cytokines such as IL-17 and IL-23 were measured by enzyme-linked immunosorbent assay (ELISA).

Results: Psychiatric manifestations

BD has significant lower score in all components of MAS and high prevalence of depression and anxiety in HDRS and HARS respectively compared with control group ($p < 0.001$). Severe depression was found in 82.9% of BD patients. Moreover, our data showed 46.7% of BD patients have moderate anxiety compared to the control group.

Serum Levels of IL-17 and IL-23

The serum level of IL-17 and IL-23 levels were significantly higher among BD patients than in healthy control (< 0.000).

There was no significant correlation between those cytokines and cognitive impairment, depression and anxiety.

Conclusion: Elevated level of IL-17 and IL-23 were observed in BD patients. However, our results do not support an association between serum IL-17 and IL-23 levels and cognitive dysfunction, depression and anxiety.

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Disclosure of Interests: : None declared

DOI: 10.1136/annrheumdis-2020-eular.254

AB0457

OBSTETRICAL OUTCOME AND TREATMENTS DURING PREGNANCY IN SERONEGATIVE PRIMARY APS: DATA FROM EUROPEAN RETROSPECTIVE STUDY

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Background:

Objectives: To compare clinical characteristics, pregnancies, and treatments during pregnancies of seronegative and seropositive APS, and analyse factors associated with adverse obstetrical outcomes.

Methods: Inclusion criteria were: (1) thrombotic arterial and/or venous; and/or obstetrical primary clinical APS (Sydney criteria); (2) absence of conventional antiphospholipid antibodies; (3) presence of at least one non-conventional APL among IgA ACL, IgA antiB2GPI, anti-vimentin G/M, anti-annexin V G/M, anti-PE G/M, anti-PS/PT G/M antibodies. The exclusion criteria were: (1) seropositive APS with conventional APS; (2) associated SLE or SLE like (SLE features and / or positive antinuclear autoantibodies); (3) other systemic connective tissue disease (Sjogren's syndrome, systemic sclerosis, myositis).

Results: 187 women (mean 33±5 years) with seronegative APS were included from 12 centers in the world and compared to 285 patients with seropositive APS. Seronegative APS have mostly obstetrical phenotypes rather than venous thrombosis in comparison to seropositive APS. The maternal and fetal outcomes and the rates of live births were not significantly different in seronegative and seropositive APS, except for higher rates of intrauterine deaths (15% vs 5%; $p=0.03$) and lower live birth term (36 ± 3 vs 38 ± 3 weeks of gestation; $p=0.04$) in the seropositive APS group. The cumulative incidence of adverse obstetrical events was significantly improved in treated seronegative APS vs untreated ones (log rank < 0.05), whereas there was no difference between patients who received aspirin or aspirin-LMWH combination.

Conclusion: Patients with clinical manifestations of APS without conventional APL should undergo testing for non-criteria APL. The diagnosis of seronegative APS could be important for a better care of these patients.

Table 1. Characteristics of seronegative and seropositive APS women.

	Seronegative APS N=187	Seropositive APS N=285
APS features		
Thrombotic APS		
Arterial APS (n;%)	0	105 (37)*
Venous APS (n;%)	9 (6)	154 (54)*
Obstetrical APS (n;%)	168 (89)	89 (31)*
Mix APS (n;%)	8 (4)	16 (6)
Non criteria features (n;%)	16 (9)	141 (49)*
Obstetrical history		
Miscarriages (n;%)	66 (35)	18 (6)*
Intrauterine deaths (n;%)	60 (32)	46 (16)*
Prematurity <34 wg (n;%)	43 (23)	31 (11)*

Table 2. Pregnancy outcome and treatment in seronegative and seropositive APS.

	Seronegative APS pregnancies N=108	Seropositive APS pregnancies N=75
Thrombotic APS		
Arterial APS (n;%)	0	20 (27)*
Venous APS (n;%)	8 (7)	42 (56)*
Obstetrical APS (n;%)	93 (86)	36 (48)*
Mix APS (n;%)	6 (6)	18 (24)
Aspirin (n;%) / Aspirin alone	95 (88) / 32 (30)	57 (76)* / 2 (3)*
LMWH isocoagulant amounts (n;%)	63 (58)	39 (52)
Aspirin-LMWH (n;%)	65 (60)	55 (73)
Preeclampsia/HELLP syndrome (n;%)	7 (7)	12 (16)*
IUGR (n;%)	5 (5)	7 (10)
Fetal loss (n;%)	33 (31)	22 (29)
Miscarriage / Intrauterine deaths	23 (21) / 5 (5)	11 (15) / 11 (15)*
Prematurity <34 weeks of gestation (n;%)	6 (6)	9 (12)
Term of fetal loss (weeks gestation)	10±8	13±7
Live births (n;%)	75 (69)	53 (70)
Term of live birth (weeks gestation)	38±3	36±3*

Disclosure of Interests: : None declared

DOI: 10.1136/annrheumdis-2020-eular.3537

AB0458

SYSTEMIC TREATMENT IN BEHÇET'S DISEASE ACCORDING TO CLINICAL PHENOTYPES. STUDY OF 111 PATIENTS

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Background: Behçet's disease (BD) is a multisystemic vasculitis. Different clinical phenotypes can be distinguished. Systemic corticosteroids are the most used drugs in BD. Conventional and biological immunosuppressants (IS) may also be used.

Objectives: To evaluate the systemic treatment of BD according to clinical domains.

Methods: Study of all consecutive 111 patients diagnosed with definitive or possible BD by expert rheumatologists in a well-defined population of Northern Spain, between 1980 and 2019. Most of them met the International Criteria for BD (ICBD) (1).

Results: We studied 111 patients (62 women/49 men), mean age at diagnosis 36.8±13.2 years. After a mean follow-up of 81.4±85 months, all patients required systemic treatment (TABLE 1-2). Biological therapy (n=28) was indicated by ocular manifestations (n=13; 46.4%) persistent, severe and refractory oral ulcers (n=10, 35.7%), neurological (n=2; 7.1%), musculoskeletal (n=2; 7.1%) or cutaneous involvement (1; 3.6%). Adalimumab and Infliximab were the biological therapy more frequently used.

Conclusion: Most patients with BD required oral corticosteroids and colchicine. Almost half required conventional IS. Up to a third required biologic therapy, especially by ocular involvement. Most patients had clinical improvement.

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Disclosure of Interests: Carmen Alvarez Reguera: None declared, David Martínez-López: None declared, Lara Sanchez Bilbao: None declared, Alba Herrero Morant: None declared, José Luis Martín-Varillas Grant/research support from: AbbVie, Pfizer, Janssen and Celgene, Speakers bureau: