AB0714

MONOCYTES TO LYMPHOCYTES RATIO IS CORRELATED WITH DISEASE ACTIVITY IN BEHÇET'S DISEASE

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Background: Behçet's disease (BD) is a complex, inflammatory multisystem disorder. Since the lack of universally recognised pathognomonic laboratory test, the diagnosis relies heavily on clinical findings. Currently, the Monocytes to lymphocytes to ratio (MLR), Neutrophils to Lymphocytes ratio (NLR), Platelets to Lymphocytes ratio (PLR) and Red blood cell Distribution Width(RDW) have been demonstrated as an assessment of disease severity in many rheumatism diseases. Nevertheless, to our knowledge, only a few studies have investigated NLR, PLR, RDW in patients with BD.

Objectives: The aim of this study is to determine MLR, NLR, PLR and RDW in BD and to investigate their relationships with disease activity.

Methods: A total of 37 patients with BD fulfilling the criteria of the International Study Group for BD and 37 age and gender-matched healthy controls were enrolled in the study retrospectively. MLR, NLR, PLR, RDW, C-reactive protein (CRP) level and Erythrocyte Sedimentation Rate(ESR) level were evaluated. The correlation between the variables were tested with Pearson correlation. Area Under Curve(AUC) value, sensitivity, specificity, and the optimal cut-off values were determined using Receiver Operating Characteristic Curves (ROC). According to the optimal cut off value, BD patients were divided into low-value group (<the optimal cut off value) and high value group (≥the optimal cut off value). The patient's clinical characteristics between the two group were compared.

Results: The MLR, NLR, PLR and RDW were (0.37±0.24), (2.91±1.95), (155.09±55.08) and (13.83±1.77) in BD group, while (0.18±0.04), (1.45±0.46), (115.66±28.01) and (13.07±1.19) in control group, the difference was significant (P all<0.05). MLR, NLR and PLR were all correlated positively with ESR(r=0.363, P<0.05; r=0.611, P<0.05; r=0.496, P<0.05) and CRP(r=0.713, P<0.05; r=0.785, P<0.05; r=0.394, P<0.05). RDW was not correlated with ESR and CRP. ROC curve results showed that the AUC of MLR, NLR, PLR and RDW for BD were 0.841(CI95%: 0.748–0.935), 0.815(CI95%: 0.712–0.918), 0.720(CI95%: 0.699–0.840), 0.635(CI95%: 0.505–0.765), MLR yielded a highest AUC. In addition, the optimal cut off value of MLR for BD was 0.23, with the specificity of 73.0% and sensitivity of 83.8%. In 37 BD patients, 14 belong to low MLR group, 23 belong to high MLR value group. The comparison results show that high MLR value group have higher CRP level and higher incidence of genital ulceration(P<0.05).

Abstract AB0714 – Figure 1

Conclusions: MLR was elevated in BD patients as compared to control group, having a close relationship with disease activity.

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AB0715

GIANT CELL ARTERITIS IS COMORBID WITH TUBERCULOSIS

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Background: Giant cell arteritis (GCA) is a medium- and large-vessel vasculitis with an onset age after 50 years, whereas Takayasu arteritis (TA) is a rare large-vessel vasculitis with an onset age younger than 40 years. The association between TA and tuberculosis (TB) was suggested. However, the association between GCA and TB was rarely reported.

Objectives: To understand the association between TA and TB

Methods: Clinical data between November 1998 and October 2017 at PUMCH, Beijing, China, were retrospectively reviewed. Ninety-one patients diagnosed with GCA were included in the study. Precise clinical data were collected and analysed.

Results: A total of 20 patients (22.0%) had a history of active tuberculosis and received anti-tuberculosis therapy. On comparing the clinical features of the patients with TB and those without TB, obvious weight loss (p=0.011), lower percentage of dyslipidemia (p=0.042), higher percentage of anti-phospholipid (p=0.010), and lower white blood cells (p=0.006) were noted in the TB group.

Abstract AB0715 – Table 1. Clinical features and comorbid diseases of the patients with TB and without TB

	GCA with TB n=20 (%)	GCA without TB n=71 (%)	P value
Age (year, diagnosis)	65.10±8.39	65.38±7.51	0.886
Scalp tenderness or pain	2 (10)	22 (31.0)	0.060
Tenderness and abnormal pulsation of temporal artery	6 (30)	13 (18.3)	0.256
Visual loss	8 (40)	25 (35.2)	0.694
Hearing loss	3 (15)	20 (28.2)	0.231
Jaw claudication	6 (30)	20 (28.2)	0.873
Arthralgia	11 (55)	36 (50.7)	0.734
GI symptoms	1 (5)	11 (15.5)	0.221
Weight loss	16 (80)	34 (47.9)	0.011

Conclusions: This study demonstrated that the percentage of TB history in patients with GCA was higher than that in the general population. The definite association between TB and GCA remains unknown. Hence, further studies are required to elucidate the mechanisms underlying TB in the pathogenesis of GCA. Clinicians should recognise the possibility of comorbid TB in patients with obvious weight loss and relatively lower white blood cell count.

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