Background: Behçet’s disease (BD) is an inflammatory disease with chronic systemic vasculitis. The disease is characterised by attacks of oral and genital ulcers, skin lesions, arthritis, uveitis, ulcers and deep vein thrombosis. The main histopathologic feature is known to be vascular inflammatory changes. Calprotectin is expressed by granulocytes, monocytes and endothelial cells, and produces an inflammatory response in human microvascular endothelial cells.

Objectives: The aim of this study was to evaluate serum calprotectin levels and their relationships with disease-related variables in patients with BD.

Methods: Forty-eight patients diagnosed with BD according to International Study Group of BD classification criteria and 22 demographically matched healthy control subjects participated in this study. Calprotectin levels were measured in blood samples from patients and controls. The disease durations of the patients were between 1 and 28 years. The Behçet’s Disease Current Activity Form (BDCAF), that scores the history of clinical features presenting during four weeks prior to the day of assessment, and Behçet’s Syndrome Activity Scale (BSAS) were used for the evaluation of disease activity.

Results: Mean serum calprotectin levels were significantly higher in patients with BD compared to the control group (60.6±43.8, 37.6±37.5, respectively; p=0.037) (Figure 1). Distribution of age (years; 40.6±12.9, 46.6±11.4, respectively; p=0.075) and sex (male; 62.5%, 45.5%, respectively, p=0.191) between these groups were similar. In the comparison of the calprotectin levels of the patients with or without the components of BD, we found significantly higher levels of calprotectin in patients with oral and genital ulceration versus without these involvements (Table 1). Since there were only 2 uveitis patients in this patient group, no calculations were made on uveitis. Serum calprotectin was significantly associated with BDCAF, BSAS, patient’s impression of disease activity, clinician’s impression of disease activity, ESR (Erythrocyte sedimentation rate) and CRP (C-reactive protein) (table 2).

Conclusions: Our study demonstrated that serum calprotectin levels were significantly higher in patients with BD relative to the control group, and were significantly correlated with disease activity scores. The presence of a newly-developed genital and oral ulceration may be associated with higher levels of calprotectin. It can be concluded that serum calprotectin level seems to be useful marker to monitor disease activity in BD.

Disclosure of Interest: None declared