# Serum MPO-DNA complex in Behçet's disease

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**Background:** Behçet's disease (BD) is a systemic vasculitis that is characterized by neutrophil activation and NETosis. There is limited data on the study of the specific marker of NETosis, the MPO-DNA complex, in BD.

**The aim** of the work was to investigate the levels of MPO-DNA complex in serum in patients with BD.

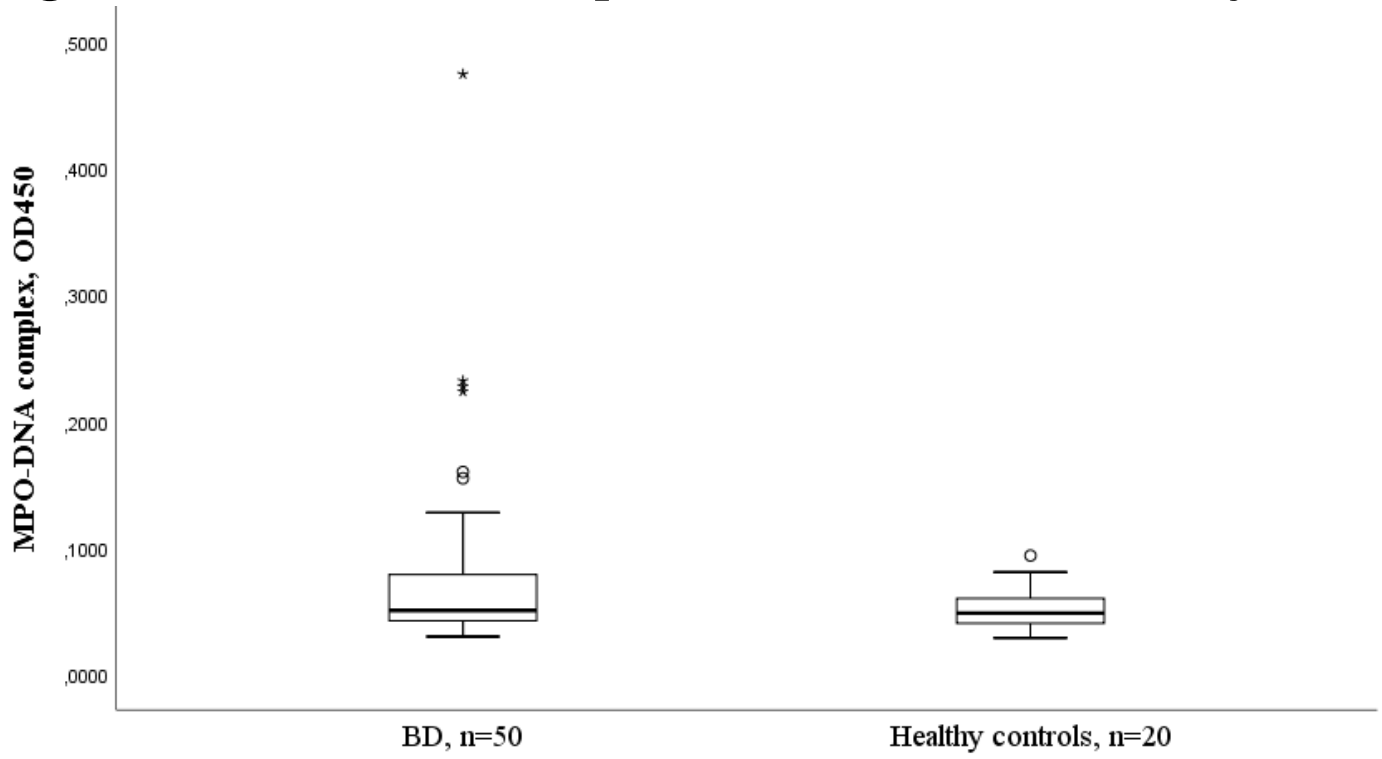
**Material and methods.**

- This study included 50 patients with BD and 20 healthy donors.
- The median age was 31,5 [26; 39] years, and the median disease duration was 9,5 [5; 14] years.
- Disease activity was assessed using Behçet's Disease Current Activity Form (BDCAF), whose values were considered low (0–1 points), moderate (2–3 points), and high (4–12 points).
- Serum MPO-DNA complex levels were determined via an enzyme-linked immunosorbent assay (ELISA). The reference values corresponding to the 5th percentile and 95th percentile of healthy controls were 0.0292-0.09335 OD450

**Results.**

The levels of MPO-DNA complex in serum were not significantly different between patients and healthy controls (0.051 [0.043; 0.079] OD450 vs. 0.0485 [0.041; 0.060] OD450, p=0.164, Fig.1). Nine (18%) of 50 patients had MPO-DNA complex levels above reference values. No significant associations were found between high MPO-DNA complex concentrations and clinical manifestations or BD activity. No significant correlation was found between the MPO-DNA complex and leukocytes, neutrophils, ESR, and CRP levels in BD.

**Fig.1. The MPO-DNA complex levels in BD and healthy controls**




**Conclusion:** In our study, no significant increase in serum MPO-DNA complex was found in BD patients. In addition, no correlation between high MPO-DNA complex levels and BD manifestations was found.

Conflict of interest: the Authors declare that there is no conflict of interest