

## **SERUM MYELOPEROXIDASE LEVELS IN PREDICTING THE SEVERITY OF STROKE AND MORTALITY IN ACUTE ISCHEMIC STROKE PATIENTS**

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**Background:** The aim of this study was to examine the level of myeloperoxidase (MPO) measured before specific treatment in patients presenting to the emergency department with acute ischemic stroke and its correlation to mortality and the severity of the stroke.

**Methods:** The study was carried out on 55 patients with a confirmed diagnosis of ischemic stroke, and on 44 healthy control group. Before specific intervention, serum samples were taken to measure levels of MPO. The medical records, demographic, clinical, laboratory and neuro-imaging data were noted. The National Institutes of Health Stroke Scale was used to determine the severity of the stroke.

**Results:** A total of 55 patients, of whom 32 (58.2%) were male, who had presented within 24 hours of the onset of symptoms of acute ischemic stroke were included in the study. Fifteen of these patients (27.2%), of whom five were women, died. There was a statistically significant difference in the serum MPO levels of patients who survived and those who died. When the patients were grouped as high or normal in terms of plasma MPO levels, a significant correlation was found between MPO level, cortical + subcortical stroke location and strokes with a lesion diameter of more than 4 cm.

**Conclusion:** We concluded from the study that the level of myeloperoxidase in the plasma of acute ischemic stroke patients rises