

Abstract

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Intraerythrocyte antioxidant enzyme activities in migraine and tension-type headaches.

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BACKGROUND: The pathophysiology of migraine and other headaches is still unknown, and research is mostly done on neurotransmitter, biochemical and vascular mechanisms. The aim of this study was to examine the role of antioxidant enzymes in the pathophysiology of headache in the interictal period of the pain process.

METHODS: In this study, glutathione peroxidase, catalase and superoxide dismutase enzyme activities were investigated in 88 cases, which included 11 migraine cases with aura, 17 migraine without aura, 32 chronic type tension headache and 28 control cases.

RESULTS: In migraine cases, superoxide dismutase and glutathione peroxidase enzyme activities were statistically lower than in the tension headache and control groups. The differences between tension-type headache and control groups were found statistically insignificant.

CONCLUSIONS: Low intraerythrocytes, superoxide dismutase and glutathione peroxidase levels may play an important role in the etiology of migraine.

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