

PLASMA NITRIT LEVELS, TOTAL ANTIOXIDANT STATUS (TAS), TOTAL OXIDANT STATUS (TOS) AND OXIDATIVE STRES INDEX (OSI) IN TENSION-TYPE HEADACHE AND FIBROMYALGIA PATIENTS

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Nitric oxide (NO) is an important transmitter in pain pathways and is likely have a role in chronic pain states. Total oxidant- antioxidant status (TOAS) also may have an important role in chronic pain syndromes. Tension-type headache (TTH) and fibromyalgia syndrome (FM) are worldwide seen chronic pain syndromes of unknown etiology. Although both disease's have some common features, there are limited studies that had been conducted for evaluating these two alike diseases.

We investigated the plasma nitrit levels, total Antioxidant Status (TAS), Total Oxidant Status (TOS), and Oxidative Stres Index (OSI) in 35 TTH, 33 FM patients and 31 healthy people and we interpreted the intergroup differences and interrelations regarding to the findings and clinical features.

The mean serum nitrit levels were sinificantly low in both TTH and FM groups according to the control group ($p=0.001$ and $p=0.001$, respectively). Mean serum TAS levels, and OSI were found to be significantly higher in TTH and FM groups according to the control group ($p=0.001$ and $p=0.001$, respectively). However, the mean serum TOS levels were sinificantly higher in FM group according to the control group ($p=0.034$) whereas there was not a significant difference between TTH and control groups ($p=0.066$).

These results indicated that; 1) FM and TTH patients revealed higher oxidative stress index and lower mean plasma nitric oxide levels than control group; and 2) TTH and FM cases revealed similar findings regarding to serum nitrit, TAS and TOS levels and OSI.