Recurrent aphthous stomatitis linked to oxidative stress

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(HealthDay)—Recurrent aphthous stomatitis is associated with increased total oxidative status and oxidative stress index values, according to a study published online Dec. 1 in the *International Journal of Dermatology*.

Selahattin Tugrul, M.D., from the Bezmialem Vakif University in Istanbul, and colleagues reviewed antioxidant status and DNA damage in 42 patients with an active recurrent aphthous stomatitis lesion and 39 healthy volunteers. Single cell gel electrophoresis was used to analyze DNA damage. An automated measurement method was used to determine plasma levels of total antioxidant status and total oxidative stress. The oxidative stress index was calculated using the oxidative status and antioxidant status measures.

The researchers found that the recurrent aphthous stomatitis group had significantly higher total oxidative status and oxidative stress index values compared with the control group, while antioxidant status values were significantly lower. DNA damage was significantly higher in the aphthous stomatitis group versus the control group. In the recurrent aphthous stomatitis group there was a significant correlation between DNA damage and the oxidative stress index and total oxidative status values.

"This is the first report in the literature that demonstrates association of recurrent aphthous stomatitis with increased oxidative status," the authors write.

More information: Abstract
Full Text (subscription or payment may be required)

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