Selenium and Antioxidant Levels Decreased in Blood of Children With Breath-Holding Spells

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Abstract:

We hypothesize that the imbalance between oxidant and antioxidant systems might be involved in the pathophysiology of breath-holding spells. The aim of this study is to evaluate the oxidant-antioxidant status in children with breath-holding spells compared to healthy children. In a case control study, 67 children with breath-holding spells were compared with 60 healthy children. Malondialdehyde values of the patients were significantly higher than those in control. Levels of selenium, glutathione peroxidase, and superoxide dismutase of the patient group are significantly lower than those in control. The present study gives helpful data about oxidant-antioxidant systems alterations in breath-holding spells in such a large patient group. These data give support to the hypothesis of the imbalance between oxidant and antioxidant systems, and selenium deficiency might be involved in the pathophysiology of breath-holding spells, suggesting the role of this system dysregulation in breath-holding spells.

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