

LETTER TO THE EDITOR

# Graves' Orbitopathy and Oxidative Stress

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To the Editor:

The article by Kaur et al.<sup>1</sup> presents an interesting new finding and their approach is very encouraging. The authors showed that patients with Graves' ophthalmopathy, as defined in the study, had an oxidative stress profile as well as antioxidant capacity directly related to thyroid status. A normalization of thyroid hormone levels has led to reduced oxidative stress and the concomitant, parallel, re-establishment of blood antioxidant activity.<sup>1</sup> However, they state that "...activity of Superoxide Dismutase (SOD), Catalase (CAT), Glutathione reductase (GSHR), Glutathione peroxidase (GPx) showed decrease which could be attributed to altered metabolism and already prevalent deficiency of essential micronutrients like zinc, copper, mercury, and selenium in the Indian population."<sup>1</sup> As physicians treating mercury-induced thyroid disorders,<sup>2,3</sup> we would like to point out that mercury is a nonessential element in humans.<sup>4,5</sup> Furthermore, there is evidence that inorganic and organic mercury may be a remarkable source of oxidative stress.<sup>6</sup> Also, exposure to mercury may cause thyroid dysfunction and may alter serum thyroid hormone levels,<sup>7-10</sup> both in humans and animals.

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