Abstract

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Zinc supplementation does not inhibit basal and metoclopramide-stimulated prolactinemia secretion in healthy men.

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BACKGROUND: Dopamine (DA) and zinc (Zn++) share common mechanisms in their inhibition of prolactin (PRL) secretion. Both substances are present in the same brain areas, where Zn++ is released together with DA, suggesting a modulatory effect of Zn++ on dopaminergic receptors.

OBJECTIVE: The aim of the present study was to evaluate the effect of Zn++ supplementation on basal and PRL secretion stimulated by metoclopramide (MCP), a dopaminergic antagonist.

METHODS: Seven healthy men were evaluated in controlled study, where MCP (5 mg) was given intravenously, before and after 3 months of oral Zn++ (25 mg) administration.

RESULTS AND CONCLUSION: Our results indicate that chronic Zn++ administration does not change basal or MCP-stimulated plasma PRL secretion suggesting that, in humans, Zn++ does not interfere on PRL secretion mediated through dopaminergic receptors.

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