Selenium-vitamin E supplementation in infertile men. Effects on semen parameters and micronutrient levels and distribution.

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OBJECTIVE AND METHODS: In order to verify the hypothesis that selenium (Se) and vitamin E (Vit E) could improve male fertility, nine oligoasthenoteratozoospermic men were supplemented for a period of 6 mo with Se and Vit E.

RESULTS: Compared to the baseline period (presupplementation) of 4 mo, statistically significant increases were observed for Se and Vit E levels, sperm motility, percent live, and percent normal spermatozoa. These improvements are likely to be "supplementation-dependent," since all of the parameters returned to baseline values during the posttreatment period. None of the couples reported a pregnancy during the study. The HPLC analysis conducted on the serum of one of the patients showed the existence of at least six different Se-containing peaks, whose Se content was affected by supplementation.

CONCLUSION: The mechanism(s) involved in these improvements of semen parameters is presently under investigation.

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