Abstract


Prospective open-label study on the efficacy and tolerability of a combination of nutritional supplements in primary infertile patients with idiopathic astenoteratozoospermia.

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AIM OF THE STUDY: To evaluate with an open-label study the efficacy and safety of a complex of nutritional supplements with antioxidant activity (L-carnitine, acetyl-L-carnitine, fructose, citric acid, selenium, coenzyme Q10, zinc, ascorbic acid, cyanocobalamin, folic acid) in primary infertile patients with idiopathic astenoteratozoospermia.

METHODS: The study was conducted in a population of 114 infertile men (96 completed the study) diagnosed with idiopathic astenoteratozoospermia since at least 18 months. Patients orally received a formulation (Proxeed - Sigma-Tau) containing L-carnitine 145 mg, acetyl-L-carnitine 64 mg, fructose 250 mg, citric acid 50 mg, selenium 50 mcg, coenzyme Q10 20 mg, zinc 10 mg, ascorbic acid 90 mg, cyanocobalamin 1.5 mcg, folic acid 200 mcg in combination once a day for 4 months.

RESULTS: At the end of study, the mean sperm progressive motility showed a statistically significant increase from 18.3 +/- 3.8 to 42.1 +/- 5.5. Sixteen patients achieved pregnancy during the study. No significant improvement were observed for sperm density and rate of morphologically normal forms. The treatment was well tolerated.

CONCLUSIONS: Carnitines in association with others functional substances can improve the most important parameters of sperm quality.

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