

COMBINATION OF MACA, KOREAN GINSENG EXTRACT AND ANTIOXIDANT THERAPY FOR MALE WITH OLIGOASTHENOZOOSPERMIA: CASE STUDY

Vegim Zhaku^{1*} Sheqibe Beadini¹, Nexhbedin Beadini², Besir Murtezan³

¹Department of Physiology, University of Tetovo, Ilindenska bb, 1200 Tetovo, Republic of Macedonia

²Department of Biology, University of Tetovo, Ilindenska bb, 1200 Tetovo, Republic of Macedonia

⁴Medical Point, Alija Avdovikj 3, 1000 Skopje, Republic of Macedonia

*e-mail:vegim.zhaku@unite.edu.mk

Abstract

More than 70 million couples suffer from infertility worldwide. Infertility is defined as not being able to get pregnant despite having frequent, unprotected sex for at least a year. Extraordinary advances have been achieved in the field of male infertility in the last decades. In recent years, the use of antioxidants in treatment of infertile men has been suggested, although there is limited evidence about the influence of nutrition on quality of semen. In this cohort study we aimed to evaluate the effect of Maca, Korean ginseng extract and antioxidants (vitamin C, natural vitamin E, zinc, selenium, L-Arginine, L-Carnitine, L-Methionine and L-Phenylalanine) on a male previously diagnosed with oligoasthenozoospermia, incapable to achieve fertilization of the healthy spouse.

The man at age of 30, from Skopje, was supplemented daily with Maca tablets 500 mg three times a day, and once a day with a tablet under a brand name available in Macedonia, consisted of Korean ginseng extract and antioxidants mention above, in a period of four months, from March to July 2017. Semen analysis with microscope phase-contrast was done in andrology laboratory in the policlinic "Bukurest", with 3 days of abstinence was done before starting with the therapy and after.

First analyze showed 20% of motile spermatozoa. Second analyze was done 41 days later and showed improvement of motile spermatozoa to 35%, while the last semen analysis was done 83 days after the second sample, which showed significant improvement of motility (50% which meets the criteria of the WHO), morphology, concentration and total number of spermatozoids that classified the man as normozoospermic.

We assume that, Maca, Korean ginseng extract and antioxidants intake could improve the quality of semen parameters in men with oligoasthenozoospermia and increase fertility rate.

Key words: *Male infertility, Antioxidants, Semen quality, Oligoasthenozoospermia.*