

## عنوان مقاله:

Myoinositol can improve freeze sperm parameters in patients with Oligoasthenoteratospermia

## محل انتشار:

هشتمین کنگره بین المللی و جشنواره دانشجویی طب تولید مثل و سومین کنگره بین المللی ژنتیک تولید مثل (سال: 1398)

تعداد صفحات اصل مقاله: 1

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## خلاصه مقاله:

Background: Myoinositol is a sugar-like compound from family of vitamin B complex. Myoinositol is mainly produced via Sertoli cells in response to Follicle-stimulating hormone. This antioxidant play an important role in regulation of motility, total antioxidant capacity, and DNA fragmentation in sperm cells. The purpose of this study is evaluation of the effect of Myoinositol on Cryopreservation of sperm in patients with Oligoasthenoteratospermia syndrome. Objective: Effect of Myoinsitol on freeze sperm parameters in patients with Oligoasthenoteratospermia. Materials and Methods: Semen samples were obtained from 40 patients with oligoasthenoteratospermi (OAT) syndrome and each sample was divided into two groups after macroscopic and microscopic analysis. in the first group, semen sample combined with only freezing medium (control group) and in the second group, semen sample mixed with freezing medium and 2 mg/ml Myoinositol (experimental group). semen samples after thawing were investigated for semen parameters with CASA analysis, reactive oxygen specifics (ROS) by DCFH-DA fluorometry, Total antioxidant capacity (TAC) and MDA test for lipid peroxidation by ELISA and DNA fragmentation with TUNEL assay. Results: After the thawing process, the Total and progressive Motility of sperm significantly increased in the myoinositol group compared with the control group. Myoinositol could not affect ROS and MDA in a significant manner, but it could increase TAC significantly. TUNEL results showed that DNA integrity was significantly maintained by Myoinositol. DNA fragmentation was decreased in myoinositol group (22.44) compared to the control group (29.67) ( $p < 0.001$ ). Conclusion: It seems that myoinositol have an effect on sperm motility, TAC and prevent increasing DNA fragmentation in freezing process. So, it could be a good component in sperm freezing process in oligoasthenoteratospermic patients.

## کلمات کلیدی:

Oligoasthenoteratospermi syndrome, Myoinositol, Cryopreservation

## لینک ثابت مقاله در پایگاه سیویلیکا:

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