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Poster Presentation Research

Evaluation of Mice Sperm Fertility Quality in Voice-Induced Stress

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Abstract

Reports indicate that one of the causes of harmful to the genital system, especially the testes is stress. Result of damage to testicular quality certainly will affect the quality of sperm fertility. Stress could be created secondarily after some pathological conditions such as neurological diseases or environmental factors. One of the causes of stress could be scary voices, such as cat voice for mice. In this study we aimed to investigate the fertility quality in the animals that were exposed against cat voice to induce stress by using in vitro fertilization (IVF). Twenty male and clinically healthy mice (20-25 g and 6-8 weeks old) were divided to 2 groups including control and test groups. The stress was induced by using cat voice. The control animals were placed in a quiet environment and the test group was kept in a stressful environment. Cat voice was administered each 2 h for 35 days. At the end of experiment the semen samples were collected from epididymis for IVF study with healthy oocytes. Finally we counts fertilized oocytes, two-cell stage oocytes, blastocyst and stopped oocytes. The results of this study showed that despite the decrease in the fertility quality in the test group compared with the control group, however, the differences were not significant ($P>0.05$). These results indicate that the stress has little effect on the in-vitro fertilization quality of mouse sperm.

Keywords: Fertility, Stress, Mice.

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