

view focuses on the potential effects of toxins in tobacco smoke, on women's reproductive function.

Methods:

We have an extensive review of existing scientific literature to explore the effects of smoking on reproductive function.

Results:

There are more than 4000 different compounds in cigarette smoke that can affect the reproductive process. The Metabolism of nicotine may vary according to gender, race, BMI, and environmental factors. Overall, smoking may increase the risk of undermining the reproductive life including the increased risk of oocyte aneuploidy, weakened follicles (weakening the morphology and the growth of oocyte), increased risk of infertility, lower fertility rates, lower success rates in IVF, weakening the E2 synthesis and synthesis of progesterone deficiency, weakening the replacement of the unborn child, and thus increasing the risk of miscarriage, impact on tubal performance resulting in abnormal embryos transferred and ectopic replacement of embryo. The harmful effect of smoking on fertility is dose-dependent.

Discussion and Conclusion:

All stages of the reproductive function are affected by the toxins in cigarette smoke. Given that cigarette smoking in women is growing, increasing knowledge about the effects of smoking will help to design the smoking cessation interventions and to improve the reproductive health of women.

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Expression of Leptin MRNA in Ovine Oocyte

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Abstract:

Introduction: Leptin, a product of Ob gene, is originally secreted by adipocytes and is involved in the regulation of food intake, energy metabolism, and reproductive functions. There are various pieces of evidence regarding the direct effect of leptin on physiological activities of oocyte as well as ovarian function. The aim of this study was to investigate the expression of leptin and its receptor by reverse transcription - polymerase chain reaction (RT-PCR) analysis in ovine oocytes.

Methods: Ovine ovaries were collected from abattoir, and cumulus-

oocyte complexes (COCs) were aspirated. Then, COCs were denuded and immediately used for total RNA extraction. The complementary DNA was synthesized from isolated RNA and used for PCR amplification. PCR reaction was performed with cDNA and designed special primers. Ovine beta actin gene was chosen as an internal control, and adipose tissue was selected as positive control.

Results: Gel electrophoresis for PCR product was confirmed amplification of 162 bp fragment of leptin. So, it was demonstrated that transcript of leptin is expressed in ovine oocyte.

Conclusion: Our findings revealed that leptin has a direct effect on ovine oocyte function which should be investigated.

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Effects of Maternal Diabetes on Balb / C Mice on 3,4,5,6 Days of Gestation

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Abstract:

Introduction: Diabetes mellitus is among the most common metabolic. Diabetes is divided into 4 main groups. One of the important types of maternal diabetes in which sugar (glucose) levels during pregnancy occurs first. Maternal's hyperglycemia has adverse effects on the fetus. The present study aims to investigate the effects of maternal diabetes on infertile female mice.

Methods: The study included 36 mice of the Balb/C respectively. The mice were divided into 6 groups of 6, including the control, sham and experimental (4 groups). Grouping was followed by mating mice and observation of vaginal plug as day zero of pregnancy. Except the control and sham groups were injected Intra-peritoneally material alloxan monohydrate with doses of 0/4 mg / kg.bw on 0, 1, 2, 3 day of gestation and sham group was injected distilled water on the same day. Glucose of Blood mice, 72 hours after injection, the days 3, 4, 5 and 6 of pregnancy, were measured by the Glucometer. Mice with blood glucose greater than 120 mg/dl were considered as diabetic. After anesthetizing the mice on day 15 of gestation, taken from the blood, blood serum levels of estradiol and progesterone were measured.

Results: Checking in day 3 of gestation, 100%, 50% gestation on day 4, day 5 of pregnancy 33%, and 0% in pregnant rats on day 6 of pregnancy, infertility was revealed.

Conclusion: Given the observed findings, we can conclude that maternal diabetes has substantial adverse effects on the fertility of mice Balb / C in 3,4,5 days of pregnancy.

Keywords: Maternal diabetes, Alloxan monohydrate, Infertility,