EFFECT OF FLUNIXIN INJECTION ON THE EPIDIDYMAL SPERM CONCENTRATION IN MICE

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INTRODUCTION

Low fertility and infertility in male and female animals imposes high costs on ranchers. A large number of bulls which have a high genetic value, are eliminated as a reason of their impotence. In bulls, fertility or reproduction capacity is the main index to determine the ability of cow's fertilization. The purpose of this study is investigating the role of flunixin in physiologic changes of reproduction system in fertility of males.

MATERIALS AND METHODS

In this research, 50 mature male mice with the average weight of 30 ± 5g were divided into 5 groups and 10 repeats and were put in 5 group cages. This experimental groups include: 1) contral group without injection. 2) Placebo group with injection of 0.3 cc normal saline. 3) Treatment1 group with injection as much as 0.5 mg/kg. 4) Treatment2 group with injection as much as 1 mg/kg flunixin. 5) Treatment3 group with injection of flunixin as much as 1.5 mg/kg body weight. Injections were done through method of IP. After action period, dissection was done. Epididymis was separated from testis and was grinded by surgical blade and solved in normal saline so that epididymal suspension which includes sperm can be ready. At the same time, the amount of sperm in epididymis was measured using epididymis suspension and hemocytometer method. The data was analyzed by SPSS software, afterward were analyzed by variance table and Duncan method. Then, the probability of less than %5 was considered significant.

RESULTS AND DISCUSSION

The result of this study shows a meaningful reduction in the average number of epididymis sperms in treatment groups 1, 2 and 3 in comparison with control group. The most reduction was observed in the group 3. Use of nonsteroidal drugs in sheep causes reduction in the sperm number in epididymis(Vane et al., 2003). Khlkutes in 1997 reported that probably a compound directly influences on the testis tissue or other parts of reproduction system and causes sperm reduction. Therefore, it can be hypothesize that probably flunixin affects on the production of sperm by testis.

Keywords: flunixin, mice, sperm epididymis

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