Study effects of Ivermectin and interaction with supplements vitamin A and vitamin C on Reproductive system in male Wistar rat

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Objective: Ivermectin is an antiparasitic drug with a widespread activity on internal and external parasites. The purpose of this study was to study effects of Ivermectin on sperm quality and quantity on adult male wistar rats.

Result: Agreeing with results, in group received Ivermectin the level of motility in comparison with control group decreased. In addition, in groups treated with vitamin A or vitamin C and also combination of both vitamins A and C, the level of motility increased. This increase in group received both vitamins A and C comparing with group treated with Ivermectin only, was significant. Findings of this study have shown that in groups treated with free Ivermectin the level of viability decreased. According to the results, in groups treated with vitamin A or vitamin C and group that treated with both vitamins A and C the level of viability comparing with group received Ivermectin only increased. This increase in group received both vitamin A and vitamin C compared with group treated with free Ivermectin was significant. As results shown in group received both vitamin A and vitamin C in comparison with group treated with free Ivermectin, the level of sperm count increased significantly. In the study of sperm count, group treated with Ivermectin has shown reduce in this factor compared with control group.

Conclusion: It can be concluded that the use of free Ivermectin has side effects on fertility rate in male rats, while consumption of vitamin A and vitamin C act as two reproduction system's amplifier.

Recent Publications

1. Allen, D.G., Dowling, P.M., Smith, D.A. (2005). Handbook of Veterinary Drugs (3rd ed.), In Lippincott Williams&Wilkins (Ed.), (PP.700-701). Philadelphia, USA.
2. Plumb,D.C. (2008). Plumb s Veterinary Drug Handbook (6th ed.) Blackwell Publishing Professional (pp.508-511). USA: Minnesota.
3. Ramsey, I. (2014). BSAVA Small Animal Formulary (8th ed.) British Small Animal Veterinary Association (pp.208-206). England.

Biography

Alireza Bashiri was born in Mashhad, 1988. He got diploma in 2006 from a grammar high school in Sirjan and has studied veterinary medicine (DVM) in Shahid Bahonar University of Kerman. Thereafter he was accepted for the residency course (DVSc) at the University of Tehran which holds the top rank in Iran. At the moment, he is a chief resident of veterinary surgery at the University of Tehran studying in the eighth semester and as a resident have finished all courses and successfully passed the board exam in the third year. He has published several articles for my academic achievement and spent an equine surgery traineeship in Italy as a valuable practical experience during my undergraduate. Although he does research in Veterinary Surgery and Anesthesiology, Equine Surgery and Orthopedics, currently in most recent publication collaborate with Department of Basic Science.

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