The effect of vitamin E and selenium on duration of ring worm healing

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Dermatophytosis is the most common contagious skin disease in cattle. The infection is self-limiting but illness, poor nutrition, overcrowding, age, immunosuppression and stress predispose animal to infection. Our previous investigations were shown that serum and hair concentration of selenium in cattle with dermatophytosis was significantly lower than the healthy ones. Due to these findings, affected cows were divided into two groups (treated group, No=18 and control group, No=17) for treating ring worm with separate methods. Routine ring worm treatment (shaving, two times daily washing with sulfur soap and water, applying iodine tincture and Phyto® topical ointment) was performed on both groups and vitamin E and selenium compound was injected intramuscularly at the beginning of the experiment only in treated group. Results showed that vitamin E and selenium compound has an advantageous effect on ring worm treatment. As in control and treated groups, healing process was observed on days 7 and 5, respectively. We concluded that lower levels of selenium in serum may predispose cattle to ringworm infection and administration of vitamin E and selenium can reduce the duration of healing process.

Keywords: Dermatophytosis treatment, Selenium, Vitamin E, Ring worm

Effects of Puncturevine (Tribulus terrestris) extract on spermatogenesis in the rat

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Tribulus terrestris (Zygophyllaceae) have been used as an aphrodisiac both in the Indian and Chinese traditional systems of medicine. Administration of Tribulus terrestris extract (TT) increased sexual behavior and intracavernous pressure both in normal and castrated rats and these effects were probably due to the androgen increasing property of TT. The objective of the present study is to evaluate the effect of TT on the spermatogenesis in rat. 66 sexuality mature male rats with 320 to 370 weight were used and were divided into three groups. Group 1 was treated with distilled water and Group 2 and 3 was treated with TT at the dose of 10 and 20 mg/kg body weight orally, respectively, once daily for 2,3,4,5, and 7 weeks. The number of caudal epididymal sperm and weight of the epididym and testis were increased significantly at groups of 10 and 20 mg/kg for 28 and 35 days (p<0.05 vs. control). The results revealed that the TT extract induced significant increase in the sperm count, improved the percentage of live sperm and their motility and decreased the number of abnormal sperm. This study showed TT is an effective medication, which increases sperm density in rat.

Keywords: Puncturevine, Tribulus terrestris, Spermatogenesis, Rat