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NOTE

Hitek in the Treatment of Endo and Ectoparasitism in Small Ruminants

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Abstract

The Hitek (oral ivermectin) is an easy, effective and well tolerate latest broad spectrum endo-ectocidal choice of drugs for small ruminants without any side effect under field conditions. The oral ivermectin has a marked efficacy against endo-ectoparasitic infestation and showed 100 and 83.3% efficacy in sheep and goat respectively.
Key words : Hitek, Endo-ectocidal drugs, Small ruminants.

Small ruminants infested with various species of endoparasites and ectoparasites leading to clinical and sub-clinical manifestations resulting in economic loss to the farming community. The infested animals show anaemia, emaciation and rough body coat due to decreased hemoglobin and pack cell volume (1). Ivermectian is widely accepted as safest broad spectrum both endo and ecto parasiticidal medicine capable to combat this problem, which acts by inhibiting the parasitic neurotransmitter Gaba. Thus the present study was carried out to assess the treatment effects on endo and ecto parasites in small ruminants.

A total of 18 animals of either sex showing natural infection with endo and ecto parasites were selected in an around Budgam district to conducting the present experiments. All the animals were diagnosed for endo-ecto parasite infestation on the basis of clinical syndrome and manifestations viz. general health and body coat condition, level and intake of nutrition. On the other hand, coprological examination was also made for diagnosis of endoparasites and physical and microscopic examination for ectoparasites (2). The experimental animals were divided into three groups for treatment : Group A : Consisted of six sheep, having natural mixed infection endoparasite (especially strongyle) and ectoparasite (ticks and mites). The sheep were given Hitek bolus (ivermactin) at the dose rate of 200µg/kg body weight orally. Group B : Comprised six goats, having natural mixed infection of ectoparasites (ticks and mites) and endoparasites (especially strongyle parasites). The goats were given Hitek bolus at the same dose rate orally. Group C : Consisted of six animals (three goats and three sheep) having the same infection as previous two group and were kept as untreated control.

After parasitological examination it was found that all the animals under this experiment were positive for both endoparasites (strongyle parasites) and ectoparasites (ticks and mites).

It was observed that most of the animals (groups A and B) were found to become free from both endo- and ectoparasites after the treatment with Hitek bolus (ivermectin) after oral administration. The results revealed that oral ivermectin has a marked efficacy against endo-ectoparasitic infestation and showed 100 and 83.3% efficacy in groups A and B respectively. Kotoch et al. (3) also found the suitable results where, goats were treated ivermectin at 200µg/kg body weight and allowed to graze throughout the year.

In contrast, the treated animals of groups A and

B compared to control group improve immediately without showing any side effect at the animals of untreated group remain and became gradually poor health conditions due to endo-ectoparasitic infestation. All the infected animals of group C were treated successfully with Hitek at the dose rate of 200µg/kg body weight after completion study period.Thus can be recommended that the Hitek (oral ivermectin) were effective against both endo and ecto parasitic infestation without showing any harmful effect in small ruminant.

References

1. Soulsby E. J. 1982. *Helminths, arthopods and Protozoa of domesticated animals.*7th edition. ELBS, Bailliare Tindell, London, UK.
2. Radostits O. M., D. C. Blood and C. C. Gay. 1994. *Veterinary medicine. A text book of disease of cattle, sheep goat, pig and horses*. 8th edition. ELBS, Bailliare Tindell, London, UK.
3. Kotoch R., P. P. S. Chouhan and D. K. Johri. 2000. Seasonal incidence of gastrointestinal nematodes in goats of Mathura region. *Ind. Vet. J.* 77 : 259—260.