Death of Antelopes Due to Heavy Infestation of Round Worms

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Introduction

Punjab Wildlife Department has established Wildlife Breeding Centers in different areas of the Punjab, were different types of antelopes and deers are kept in captivity. As the animals remain in restricted fenced areas so get pollution of their own feces and urine. These animals also get food of the market which may have any type of biotic pollution and infestation of helminths also. To get the animals free of intestinal parasites they are treated with different dewormers available in the market. The work presented in this paper consists on the deworming of different types of antelope and deer with herbal preparations used as anthelmintic drugs. It was not a pre-designed experiment but was a mis-happening.

History

23 blue bull Boselaphus tragocamelus, 85 Hog deer Axis paccinus, 15 Spoited deer Axis axis, 4 Chinkara Gazella gazella and 50 Black Buck Antilope cervicapra were kept separately in different enclosures. Deworming was done continuously for three days with a herbal product containing extract of warm wood, embelia, margosa, mastic, vasaka, mesua, butea seeds amber sucomlum, omon seeds, veronia antelmintic, pedallium murex, balochi seeds and Gunt ammocaiac. A dose rate of 20 mL per 15 kg b.wt. was given to the animals by mixing the drench in gram pulse. It was not possible to capture and weigh each and every animal so the dose rate was calculated approximately. To avoid under dosing the dose was kept double than the recommended dose.

On the third day of post deworming six Black Bucks, two Chinkara and one Blue Bull showed the symptoms of abdominal discomfort and diarrhea and mortality in Black Buck started. Day by day the number of sick animals increased and within ten days. 12 Black Bucks and 2 Chinkara died. Their dead bodies were sent to Veterinary Research Institute, Lahore for post-mortem to know the cause of death. Post-mortem and laboratory tests indicated heavy infestation of round worms in ten Black Bucks and Chinkara. Lab tests were also positive for Pneumonia in six Black Bucks and one Chinkara. Materil of dead animals was also chemically examined for any type of suspected poisoning and tests were found negative. Post-mortem reports and laboratory tests revealed that the death of animals was due to heavy infestation of round worms and pneumonia.

The other reason may be that the animals having heavy infestation of round worms could not get the required dose of anthelmintic drug, the round worms present in their intestine, tangle
themselves in masses and completely blocked the intestine. Surgical removal of these masses was not possible consequently the animals having heavy infestation of round worms died.

In heavy infections migration of the larvae through the lungs cause hemorrhages and sets up a severe pneumonia which may be fatal. The invasion may be fever, anemia, leucocytosis and eosinophilia (Chandler and Read, 1961). The same was observed in the present case.

In case of herbal products, anthelmintic efficacy of the ingredients is not proven and it is also not indicated that how much quantity of the ingredients is available in the product from which one could assess the exact dose and efficiency of the drug.

Even then mortality was observed due to parasitism. First reason of death may be inefficiency of the drug as in case of herbal products, anthelmintic efficacy of the ingredients is not proven and it is also not indicated in the composition of drug.

Coles (1986) and Coles and Roush (1992) reported that for complete deworming calculation of accurate therapeutic dose is very essential, which is not possible in case of wild animals as it is very difficult to capture and weigh the wild animals. So to avoid under dosing the dose of the dewormer was kept double than the recommended one.

References