Cairo University
Faculty of Veterinary Medicine

Some Studies on Internal Parasitic Diseases Affecting Sheep and Goats

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For Master degreeof Veterinary Medical Sciences
(Infectious Diseases)

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Abstract

Parasitic gastroenteritis (PGE) is a disease complex affecting sheep and goats and lead to greateconomic losses including reduction in the productivity, stunted growth, reduced weight gain, low fertility, high treatment costs, and mortality. A total of 783 faecal samples from Egyptian and Saudi Arabian sheep of different ages were examined parasitologically for presence of internal parasites in different seasons during the period from November 2014 to March 2016. Faecal egg counts of infested sheep were calculated to determine the intensity of infestation. The efficacy of used anthelmintics were evaluated after 2, 4 and 6 weeks post treatment. The results showed that the prevalence of infestation with PGE, Monezia, and mixed infestation in Egypt were 62.5, 17.3, 9.2 and 11%, while in Saudi Arabia were 88.6, 2.2, 0 and 9.2%, respectively. The highest rate of infestation with PGE and Monezia in Egypt was recorded in young age(under one year) while the highest rate of infestation in Saudi Arabia was recorded in adult sheep (2- 3 year of age).Blood examination of naturally infested sheep revealed anemia, leukocytosis, eosinophilia, neutrophilia and thrombocytopenia. Detection of antibody of Monezia expansa infection in serum of naturally infested sheep by indirect ELISA showed that the cutoff point was set 0.103 and a total of 87/92 (94.5%) sera were identified as seropositive by indirect ELISA. The treatment efficacy % of Ivermectin against PGE was 90, 100 and 100% after 2 weeks, 4 weeks and 6 weeks post treatment, respectively. Levamisole showed efficacies of 80, 100 and 100% after 2 weeks, 4 weeks and 6 weeks post treatment, respectively. Albendazole is the lowest efficacy for PGE treatment among used drugs.The treatment efficacy of Triclabendazole for Monezia was higher than Albendazole, while neither Ivermectin nor Levamisole approved efficacy for Monezia treatment.

Key words:Sheep, PGE, Monezia, Prevalence, Faecal egg count, Indirect ELISA, Ivermectin, Levamisole, Albendazole, Triclabendazole, Blood examination.

Dedicate

To

My parents and my wife

With all love and gratitude

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