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administered by deep intramuscular injection. Blood collection was by jugular venipuncture. Packed Cell Volume was determined by Haematocrit technique while the level of parasitaemia was determined using wet mount, Giemsa staining and Buffy Coat Technique. Data on infection rates and PCV were analysed using analysis of variance (ANOVA).

Results

The mean retreatment interval during the first prophylactic cycle (of 10 weeks duration) was 5.3 ± 2.1 and 9.2 ± 1.1 weeks respectively for diminazene and isometamidium groups of cattle. The mean retreatment interval during the second prophylactic cycle for the two groups of animals was 4.2 ± 2.4 and 8.2 ± 0.3 weeks respectively. The mean retreatment interval during the third prophylactic cycle was 3.1 ± 2.2 and 6.2 ± 1.5 weeks respectively. At the end of the study, the mean PCV values were $30.4 \pm 1.4\%$ and $34.5 \pm 1.2\%$ for the two treatment groups. The mean RBC counts were respectively $8.9.2 \pm 1.4$ ($\times 10^{12}/dL$) and 10.5 ± 1.4 ($\times 10^{12}/dL$), while the haemoglobin concentrations were 11.2 ± 2.1 (g/dl) and 13.4 ± 1.1 (g/dl).

Conclusion

Both trypanocide products provided effective prophylaxis against trypanosomoses when administered at recommended dose rates. Isometamidium was more effective prophylactically than Diminazene. There were also indications of possible resistance to diminazene aceturate in the sentinel cattle. Therefore isometamidium is always the last resort in the field (Stevenson, *et al.* 2000).

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PESTE DES PETIT RUMINANTS (PPR) IN OYO STATE: CURRENT EPIDEMIOLOGY AND CLINICAL FEATURES.

Lasisi, O.T and Olaogun, S.C.

Department of Veterinary Medicine, University of Ibadan, Ibadan, Nigeria.

Introduction

Small ruminant plague (PPR) is a highly contagious viral disease of sheep and goats causing high morbidity and mortality. It is considered to be one of the main constraints in improving the productivity of small ruminants in endemic areas. Clinically, it is characterized by severe pyrexia, catarrhal ocular and nasal discharge and erosive stomatitis in early stages and later on develops into severe viral enteritis and pneumonia. It is of high economic importance because of high mortality rates especially among young animals and restriction on livestock trading (Dhar *et al.*, 2001, Lasisi *et al.*, 2002). There is a need to investigate the current epidemiology and clinical features of this disease among our small ruminants (Hussain *et al.*, 2003).

Objective

To investigate the incidence of peste des petits ruminants (PPR) infection among small ruminants in Oyo State, Nigeria.



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Materials and Methods

9, 605 small ruminants were clinically examined during natural outbreaks of PPR in 20 local government areas of Oyo State over a 5-year period. Small ruminants of all ages and both sexes were involved in the study. Field records, clinical signs and questionnaires from field veterinary officers were adopted. Prevalence of antibodies against the PPR virus was determined using competitive Enzyme Linked Immunosorbent assay (cELISA). Data obtained were subjected to descriptive and inferential statistics.

Results Of all the small ruminants, goats (86.9%) (n=8,346) were involved during outbreaks while the remaining 13.1% were sheep (n=1,259). Kids from above seven months of age were more susceptible than the adults. The overall mortality rate recorded was 70.4%. The antibodies against the virus reached peak in animals between ages 1½ and 2½ years and at the rectal temperature of 40.1±13.4°C. Occurrence of the infection was most recorded during the wet months of each year (May, June, July, August and part of September). There was no significant ($p>0.05$) difference in the susceptibility to the infection among the small ruminants in urban areas and those in the rural communities.

Conclusion The occurrence of the infection was related to the heavy rainfall, mingling of small ruminants at certain times of the year and the higher susceptibility among the young animals. This condition caused heavy mortalities among goat population, thus hindering productivity.

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ANTIHYPERGLYCAEMIC AND IN VITRO ANTIOXIDANT ACTIVITIES OF XYLOPIA AETHIOPICA FRUIT METHANOLEXTRACT

Ezeja M.¹, Nwaehujor C.O.², Anaga A. O.² and Asuzu I. U.²

¹Department of Veterinary Physiology, Pharmacology and Biochemistry, College of Veterinary Medicine, Michael Okpara University of Agriculture, Umudike. Abia State.

²Department of Veterinary Physiology and Pharmacology, Faculty of Veterinary medicine, University of Nigeria Nsukka, Enugu State.

Summary

The study evaluated the antihyperglycaemic and antioxidant activities of the methanol extract of *Xylopiya aethiopia*. Doses of 100, 200 and 400 mg/kg of the extract administered orally were used to assess the antihyperglycaemic activity in alloxan-induced hyperglycemia in mice by measuring the fasting blood sugar (FBS) levels at 0, 1, 3 and 6 hrs with blood from the tail snip using autoanalyzer (AccuCheck Advantage II®) glucose kit and for oral glucose tolerance test (OGTT) in rats with blood glucose levels measured at 30, 60, 120 and 180 min after glucose load. Glibenclamide (2 mg/kg) was used as a standard reference drug. The antioxidant activity was evaluated with ferric reducing antioxidant power (FRAP) and 1, 1-diphenyl-2-Hydraxyl (DPPH) photometric assay using 10- 400ug/ml concentrations of *Xylopiya aethiopia* extract (XAE) and the effects compared with ascorbic acid standard. The extract at the doses used and the reference drug caused various levels of significant ($p < 0.01 - p < 0.0001$) time and dose dependent decrease