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Degree Awarded : M.V.Sc
Year of Award : 2002
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Title of Thesis : Studies on haemocrisis in cattle of Palam Valley of Himachal Pradesh

Abstract

Anaemia is one of the important clinical abnormalities encountered in bovines under field conditions. During the present investigation, 250 cattle of Palam Valley were screened for anaemia based on hemoglobin value and cattle having hemoglobin less than or equal to 8 g % were considered anaemic. These animals were further subdivided into three sub-groups:

a) Group I : Cattle with haemoglobin value less then 4g %

b) Group II : Cattle with haemoglobin value more then 4g % but less than 6g

c) Group III : Cattle with haemoglobin value between 6g % and 8g %

The overall incidence of anaemia was recorded to be 60.8% (152 out of 250 cattle out of 152 anaemic animals, 84 (55.2% showed anaemia due to mineral deficiency, 17 (11.1%) due to haemoprotozoan diseases, 12 (7.8%) due to helminthiasis, 5 (3.2%) due to tick infestation and 1 (0.65%) due to uterine haemorrhage. In 33 (21.7%) animals, the anaemia was due to combined effect of helminthiasis and mineral deficiency. The prominent clinical signs were pale conjunctival mucous membrane, decreased milk yield, rough hair coat, dullness and depression, in general. However specific signs like haemoglobinuria in babesiosis and hypophosphatemia,
swollen pre-scapular lymph nodes in theileriasis were also noticed. The haematological examination indicated significantly (P<0.05) reduced haemoglobin concentration, packed cell volume and total erythrocytic count. The erythrocytic indices showed microcytic hypochromic anaemia in majority (53.28%) of anaemic animals. Acid base analysis reflected acute metabolic acidosis in animals with haemoglobin level less than 4g %. The various therapeutic regimens adopted were found to be effective in treating the anaemic animals except 40 % animals with haemoglobin value less than 4g %. Blood transfusion proved a very valuable therapeutic tool in critically anaemic animals.