Haemonchosis in sheep: A case report

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Abstract
This case report describes the clinical findings and postmortem changes of a case of severe chronic haemonchosis in sheep.

Keywords: Haemonchosis, ovine, post-mortem changes

Introduction
Helminthes infection is pervasive in livestock farming especially in small ruminants due to allowing of animals for grazing on pasture contaminated with infective larvae of nematodes [1]. Haemonchus is the most rampant species of nematodes which adversely affects the sheep by hampering production. The major clinical manifestations include anaemia, anorexia, retarded growth, poor fertility and sometimes even death of lambs may incur economic losses to farmers [2, 3, 4]. Haemonchus is a nematode of family Trichostrongylidae but later classified under haemonchidae [5]. The present case study would discuss about clinical signs and gross postmortem findings of haemonchosis in sheep.

Case History and Observation
An adult male of Nellore brown sheep weighing approximately 50 kg was presented by primary complaint of depression and recurrent diarrhoea by a sheep farm owner. External examination findings revealed pale conjunctiva (Fig.1), emaciated (with body score 1 out of 5) and FAMACHA score of 5 and greenish feaces matted at perineal region. Necropsy findings of this case observed was poor body condition with minimal visceral and subcutaneous fat with a pale appearance of serous membrane. Presence of frothy exudates at the thoracic inlet, airways and parenchyma of the lungs and thickening of abomasal wall with presence severe haemonchus worms (Fig.2a & 2b) were also noticed. There was severe serous atrophy of fat in omentum, kidney and heart. Congestion of liver (Fig.3) and pulmonary oedema (Fig.4) were observed. Therefore to summarize the gross postmortem findings of this case are thickening of abomasal wall indicates severe and chronic infection by haemonchus species, presence of frothy exudates at thoracic inlet, airways and lung parenchyma indicates pulmonary oedema due to hypoalbuminemia and hepatomegaly together with loss of subcutaneous and visceral fat were observed in this case which may be due to chronic malnutrition and haemonchus infection. Therefore tentative cause of death of ram in this case was due to respiratory and circulatory failure due to pulmonary oedema and hypoxia due to hypoalbuminemia and anaemia due to severe haemonchus infection and malnutrition.
Prevention and control
Management practices include selection of resistant lines of sheep, adoption of proper grazing techniques and vaccination programme. Mixed grazing restricts the consumption of infective larvae by the specific host. Provision of a well balanced diet, and strictly follow the biosecurity measures, prophylactic administration of Antihelmintics (dewormed regularly) to all the flocks during the rainy season. Levamisole is shown to be effective for haemonchosis in sheep. Additionally advised to use iron supplements to prevent anaemia.

References