Incidence of Hydatidosis in Slaughtered Goats

A Sangaran and S Arunkumar

Department of Veterinary Parasitology, Madras Veterinary College, Tanuvas, Chennai - 600 051

ARTICLE INFO
Received: 
Revised: 
Accepted: 

Key words: 
Chennai 
Goats 
Hydatidosis 
Incidence

Corresponding Address:
A Sangaran
sangaranvet@gmail.com

Cite This Article as: Sangaran A and S Arunkumar, 2013. Incidence of hydatidosis in slaughtered goats. Inter J Agri Biosci, 2(x): xxx. www.ijagbio.com

INTRODUCTION

Hydatidosis is a zoonotic disease of man and animals caused by the larval stage of the dog tapeworm, Echinococcus granulosus; the life cycle involving two mammalian hosts. Definitive hosts are dogs in whose intestine the adult worms occur. Intermediate hosts are herbivores and omnivores wherein the development of the hydatid cysts occurs in the liver, lungs as well as in other organs. The rural population especially in developing and under developed countries is at a higher risk of acquiring hydatidosis because of close proximity with domestic and wild animals. This disease is recognized as one of the world's major zoonoses affecting both humans and their domestic animals and is of both economic and public health importance. Incidence of hydatidosis has been reported earlier by Sundaram and Natarajan (1960) by examination of animals slaughtered at Madras. Hydatidosis in animals results in significant economic loss to the meat industry through condemnation of affected organs viz. liver, lungs and other organs apart from reduced production of milk, meat or wool. The disease in the intermediate hosts is typically a chronic parasitic infection with viable cysts pertaining in many instances throughout the life of the infected animals. In the Middle East, the prevalence is high in man (El-Multanseh, 1984) and in sheep, goats, cattle and camels (Al Yaman et al., 1985). Irrespective of the host species infected, hydatid cysts occur mostly in the liver and lungs with varying degrees of involvement of one or other of these organs (Schantz, 1972). In the present study, work was undertaken to observe the incidence of hydatidosis in goats during slaughter in the slaughter house, Chennai.

MATERIALS AND METHODS

The incidence of hydatidosis in food animals such as goats was observed at the time of slaughter by inspecting the viscera and carcasses for the presence of hydatid cysts in lungs, liver, spleen and other viscera. The hydatid cysts were collected at the time of slaughter from various organs affected and brought to the laboratory for further process. The hydatid cysts were examined to ascertain whether fertile or sterile cysts based on the presence or absence of protoscolices. The organ wise fertility rate was also recorded to know the percentage of fertile or sterile cysts in the organs involved.

RESULTS AND DISCUSSION

Out of 952 goats examined during slaughter, 68 goats showed hydatid cysts in various organs giving an incidence of 7.1 per cent in slaughtered goats. Lungs accounted for 44 (64.7 per cent), liver 23 (33.8 per cent) and the involvement of both lungs and liver was observed in 1 (1.5 per cent) of the 58 goats with hydatid cysts. In goats, the incidence of hydatidosis has been reported to vary from 1.35 per cent (Janardhan Pillai et al., 1986),