

OCCURENCE OF HYDATID CYSTS IN SLAUGHTERED SHEEP

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ABSTRACT

Echinococcosis/hydatidosis is a zoonotic disease that occurs throughout the world and causes considerable economic losses and public health problems in many countries. A cross sectional study was conducted to determine occurrence of hydatidosis, in sheep slaughtered at Perambur Slaughter house Chennai. Occurrence of Hydatidosis was found to be 5.15 per cent and showed lower occurrence in compare with previous studies.

KEYWORDS: Sheep, Hydatid cyst, Occurrence, Slaughter House

INTRODUCTION

Hydatidosis is a one of the zoonotic disease between humans and animals that has a significant position among parasite infections. Hydatid disease is caused by the larvae stage of tape worm *Echinococcus granulosus*. It's also called echinococcosis. Echinococcosis is a zoonotic disease of animals that affects humans. Like all tapeworms the life cycle involves two animals

Lahmar *et al.*, (2004). A carnivore is the definitive host where the adult worms live in the intestines – and almost any mammal, including humans, can be the intermediate host - where the worms form cysts in various organs. The disease symptoms are caused by the cysts, which are slow growing fluid filled structures that contain the larvae and are most often located in the liver or lungs called hydatid cysts, for *E. granulosus*, they act like tumours that can disrupt the function of the organ where they are found, cause poor growth, reduced production of milk and meat, and rejection of organs at meat inspection. In humans the disease can be severe, occasionally fatal, and the treatment is lengthy and expensive. *Echinococcus* is benign in the intestine of the carnivorous definitive host. Hence study was conducted to know the occurrence of hydatid cyst in sheep slaughtered at perambur slaughter house, Chennai.

MATERIALS AND METHODS

Sheep were observed for the presence of hydatid cysts in lungs, liver and other organs during slaughter .Visual inspection, palpation and systematic incision of each visceral organ particularly the liver, lung, heart, kidney and carcass were carried out according to procedures recommended by FAO (1994). Cyst fertility was examined according to Daryani *et al.* (2006). The cysts were classified as sterile (fluid filled cyst without any protoscoices), calcified, non viable (cysts with dead protoscoices) and viable or fertile (cysts with live protoscoices). To determine viability of the protoscolices, a drop of cyst fluid was placed on a microscopic glass slide and cover slip was applied and observed for the motility of flame cells activity like peristaltic movement.

RESULTS AND DISCUSSIONS

Hydatidosis is one of the most important zoonotic diseases that distribute in the most area of the world.

The disease has no specific symptoms. And the most diagnosis, especially in the intermediate hosts (sheep) occurs on slaughterhouse carcasses. So slaughterhouses are only and sure location for diagnosis. Because the liver and lung lesions are mostly visible with the naked eye and are distinguishable. In this study a total of 950 sheep were observed at slaughter for the presence of hydatid cysts. Forty nine sheep were found positive for the presence of hydatid cysts examined at slaughter giving an overall prevalence of 5.15 per cent in sheep. Occurrence of CE in sheep was reported to be 6.3 per cent and 13.5 per cent in Chennai in earlier studies Sunil Kumar, (2009). The epidemiological surveys on Cystic echinococcosis indicated that it varied from 3-12 per cent (Mehrabani *et al.*, 1999; Dalmi *et al.*, 2002). Variations in the incidence could be due to the changes in the temperature, environmental conditions, and the management practices adopted in rearing the animals. The present study showed lower occurrence in comparison with the earlier reports. Contrary to past decades, various precautions and changing in behavior pattern such as awareness about the disease, routine deworming of dogs against tapeworms as well as decrease in the number of stray dogs could be the major reasons for the decrease in the incidence (Beyhan and Umur, 2011).

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