INCIDENCE OF HYDATIDOSIS IN BUFFALOES SLAUGHTERED AT CHENNAI

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ABSTRACT

Study on the incidence of hydatidosis in buffaloes was done at the time of slaughter by inspecting the viscera and carcasses for the presence of hydatid cysts with particular reference to lungs, liver, spleen etc. The incidence of hydatid cysts in buffaloes was found to be 13.5 per cent. The presence of hydatid cysts was observed more in lungs with 59 per cent followed by 28 per cent in liver, 8 per cent in spleen and 5 per cent showed affection of both lungs and liver from the 61 buffaloes with hydatid cysts.

Keywords: incidence, organ wise, hydatidosis, buffaloes

Hydatidosis is a zoonotic parasitic disease caused by the larval stage of \textit{Echinococcus granulosus}, involving two mammalian hosts with carnivores such as dogs are the definitive hosts and herbivores and omnivores as the intermediate hosts in which development of hydatid cysts occur in lungs, liver and other organs. In animals, hydatidosis causes major economic loss due to condemnation of liver, lungs, other organs and at times the whole carcass. Severe hydatidosis in animals results in retarded growth, reduced quality and yield of meat, milk or wool. It is a public health and economic problem of global proportions. The present study was carried out to know the incidence of hydatidosis in buffaloes slaughtered at Chennai as buffaloes forms a major part of the food animals being slaughtered for meat consumption by the public.

The carcass and the viscera of the slaughtered buffaloes were inspected for the presence of hydatid cysts with particular reference to lungs, liver, spleen and other organs. The hydatid cysts collected were examined in the laboratory to ascertain whether fertile or sterile cysts based on the presence or absence of protoscolices (Soulsby, 1982). The organ wise fertility rate was also recorded so as to know the percentage of fertile and sterile hydatid cysts in different organs.

Sixty one buffaloes were found to harbour hydatid cysts, out of the 452 buffaloes examined with an overall incidence of 13.5 per cent. The frequency of distribution of hydatid cysts in various visceral organs with particular reference to lungs, liver and spleen was also studied. Lungs accounted for 59 per cent (36), liver 28 per cent...
Sangaran et al., and spleen 8 per cent (5) and the involvement of both lung and liver was observed in about 5 per cent (3) of the 61 buffaloes with hydatid cysts.

Hydatid cysts in lungs accounted for 56 per cent (20) and 44 per cent (16) of fertile and sterile cysts respectively out of the 36 animals with hydatid cysts in lungs. In 17 buffaloes with hydatid cysts in liver, 59 per cent (10) and 41 per cent (7) were found to be fertile and sterile cysts respectively. Out of 5 hydatid cysts from spleen, only one cyst (20 per cent) was fertile. Of the 3 animals with hydatid cysts involving both lungs and liver, one animal had fertile cyst (33 per cent).

The incidence of hydatidosis (35 per cent) in buffaloes was reported by Kosalaraman and Ranganathan (1980) in Madras. It varied from 11 to 48 per cent (Singh and Dhar, 1988 and Deka and Gaur, 1990). The present finding of 13.5 per cent infection correlates with the observations of earlier workers.

Lungs were found to be affected more frequently followed by liver and spleen. Similar findings were also reported by Janardhan Pillai et al., (1986). Koshy (1984) also observed that lungs were more affected with hydatid cysts than liver. Spleen was infected less frequently as low as 2.7 per cent (Sundaram and Natarajan, 1960).

Kosalaraman and Ranganathan (1980) reported 35 per cent of hydatid cysts to be fertile from buffaloes in Madras, where as Koshy (1984) reported 20 per cent of fertile cysts in liver, 28 per cent in lungs and 36 per cent in spleen. In the present study, 52 per cent fertile cysts were found in the various organs and maximum fertile cysts were recorded in liver (59 per cent) followed by lungs and spleen.

REFERENCES


