# Prevalence and Distribution Pattern of *Sarcocystis* spp. in Camels (*Camelus dromedarius*) in Tambool Slaughterhouse

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## ABSTRACT

*Sarcocystis spp.* are zoonotic cyst-forming coccidian parasites that prevalent in livestock all around the world. This study was conducted to investigate the prevalence as well as distribution pattern of *Sarcocystis spp.* Infection in camels slaughtered in Tambool slaughterhouse- eastern Sudan.Meat samples(oesoghagus, diaphragm, heart, tongue and thigh muscles) were collected from 200 slaughtered camels during ten months (March – December 2015). 52.4% of examined samples were positive for bradyzoites of the parasites using pepsin-digestion method while *Sarcocystis* cysts were detected in 27% of examined histopathological samples. The distribution patterns of *Sarcocystis*cystswere148 (74%) oesophagus, 141 (70.5%) diaphragm, 11o (55%) heart, 74 (37%) tongue, 51 (25.5%) thigh muscle. Oesophagus was the most infected organ among the examined samples. The difference in prevalence rates between the two used techniques may be due to the very small portions examined in histopathology .The infection rate increased with the animal age, there were no significant differences in the infection rate between males and females. Histopathological examination showed a presence of two types of *Sarcocystis* cysts between the examined muscles ; thin walled cysts and thick walled ones.This results worth a look to the economic importance of *Sarcocystis* parasite which affects meat quality andinduces weight loss , weakness, abortion and even death in domestic animals .

**Keywords:** *sarcocystis spp., camel, prevalence, Tambool, Sudan*