

ENTEROBIOSIS IN CAPTIVE NON-HUMAN PRIMATES

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Pinworm infection is given more importance throughout the world owing to its zoonotic importance. Information on the occurrence of pinworm infection is rarely reported in captive non-human primates. Fowler (1986) quoted on the incidence of pinworm infection in various species of non-human primates and Hahn *et al* (2003) reported about its incidence in free ranging Kenyan baboons.

Random collection of fecal sample from non-human primates was carried out at Arignar Anna Zoological Park, Vandalur and 10 Nos. of fecal samples were obtained and it included Savanna baboon (1) rhesus macaque (1) and Chimpanzees (5). The fecal samples were subjected to the routine floatation and sedimentation techniques.

Out of the ten samples collected from these non-human primates, 2 samples from captive chimpanzees revealed presence of *Enterobius* species and all other samples examined failed to reveal any evidences of internal parasites. Enterobiosis as diagnosed in the present study is always given significance due to its zoonotic nature. Arora (2003) quoted that *Enterobius vermicularis* infection is acquired by the captive non-humans primates from the keepers or handlers and the affected primates can act as reservoirs to reinfect human. The presence of *Enterobius* species was identified as per the identification keys furnished by Soulsby (1982) who stated that eggs of *Enterobius*

species have elongated shape, slightly flattened on one side with plug at one end and a larva inside the egg. The occurrence of *Enterobius* infection may cause the peri-anal irritation and digestive problems as quoted by Beynon and cooper (1991). However, typical symptoms could not be ruled out clearly in the animals under study and piperazine at the rate of 100 mg/ kg, orally is useful for the treatment as cited by Beynon and cooper (1991). Similar to the finding in this study, Alwar and Lalitha (1961) also encountered *Enterobius* sp infection in non-human primates like rhesus macaques, while Siddique and Mirza (1956) encountered presence of *Enterobius* species in a langur.

Though the standard floatation technique in this study revealed the presence of *Enterobius* species, it is stated that pinworm eggs are rarely found during such examination and suggested the examination of scrapings from the urogenital area or on cellophane tape preparation obtained from the anal opening (Wallach and Bolver, 1983)

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