Intestinal Parasitism in the Rhesus Monkey

Primary Investigators: Harry Rozmiarek, MAJ, VC
Prayoth Tanticharoenyos, DVM

Associate Investigators: Elisandro Rodriguez, SSG
Kitti Watanasirmkit, B.Sc.
Pravet Lertprasert

OBJECTIVE: To determine the incidence of intestinal parasites in rhesus monkeys upon arrival from India, and to evaluate the efficacy of treatments used to control them.

BACKGROUND: Over 500 rhesus monkeys per year are needed to support a malaria drug screening program at SMRL. These animals are received in groups of 85 every 60 days, weigh 2—3 kg upon arrival, and come directly from the wild in India. After a 45 day quarantine period in our colony, they are utilized and then sacrificed within 60—90 days.

PROGRESS: In February 1973, a one year study was initiated to monitor the prevalence of internal parasites in the rhesus monkeys being received from India. Fecal specimens are being taken from each animal on the day of arrival and are examined by the flotation method for ova and parasites. The animals are then treated as a group on the next day. Fecal specimens are taken ten days after treatment and again examined for ova and parasites. Results of these examinations are shown in Table 1.

DISCUSSION: The data presented in Table 1 represents 2 groups of 85 animals each, which were received in February and March 1973. It appears from this data that treatment with 100 mg/kg of Thiabendazole is quite effective against all helminths encountered except whipworms, but no firm conclusions may be drawn at this time. When completed in February 1974, this study should give an indication of the internal parasites to be expected in newly arrived young rhesus monkeys from India, as well as an indication of seasonal variation. It should also help in evaluating the parasite treatment regimens being used.

Table 1.
Internal Parasites Found in Rhesus Monkeys

Parasite Found	Before Treatment		After Treatment*	
	Number Positive	Percent Positive	Number Positive	Percent Positive
HELMINTHS				
Ascaris sp.	1	0.6%	1	0.6%
Capillaria sp.	0	0.0%	1	0.6%
Strongyloides sp.	118	69.8%	4	2.4%
Trichostrongylus sp.	57	33.7%	1	0.6%
Ancylostoma sp.	17	10.1%	0	0.0%
Trichuris sp.	7	4.1%	5	3.0%
Unidentified	0	0.0%	3	1.8%
PROTOZOANS				
Balantidium coli	60	35.5%	32	19.0%
Chilomastix mesnili	1	0.6%	3	1.8%
Entamoeba coli	109	64.5%	58	34.5%
Entamoeba histolytica	37	21.9%	37	22.0%
Endolimax nana	25	14.8%	21	12.5%
Giardia lamblia	0	0.0%	15	8.9%
Iodamoeba butschlii	53	31.4%	12	7.1%
No Parasites or Ova	3	1.8%	59	35.1%

* Treatment was 100 mg/kg Thiabendazole via nasogastric tube