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EXPERIMENTAL STUDY ON TRICHINOSIS IN CHICKENS

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The intestinal and muscular phases of *Trichinella spiralis* (OWEN, 1835) RAILLIET, 1895 (designated polar bear strain) infection in 1-day-old chickens were studied.

Recovery of the adult worms from the intestines of chickens orally infected with *T. spiralis* between 5th and 21st days postinfection ranged from 8.6% to 0.8%. Most of the worms were found in the ceca, followed by the lower small intestine and colon. Almost no worm was found in the upper small intestine. The average number of larvae observed in the uterus of the female worms recovered from chickens on the 7th day postinfection is less than those of the worms recovered from mice. The result of the *in vitro* larvaporation of the 7th day postinfection gravid female worms shows that worms obtained from mice shed significantly greater number of larvae than those obtained from chickens. *In vitro* larvaporation is neither influenced by the body temperature nor by the serum of chicken or mouse. Histological sections of the intestines show a slight increase in the number of globule leucocyte and minimal inflammation.

Larvae were detected in the various muscles of the infected chickens between 9th and 21st days postinfection. No larva was detected on and after the 25th day postinfection. The development of the larvae in the muscles of chickens and mice was compared. Little or no development of the larvae in the chicken muscle was observed.

It is concluded that the natural resistance of chickens to *T. spiralis* infection lies in the muscular phase of the parasite.