Acanthocheilonema viteae in Mastomys coucha: Chemotherapeutic and Chemoprophylactic Role of Vitamin A in Experimental Filarial Infection

Sunita Bhatnagar^{a,*}, Shailja Bhattacharya^b, and R. K. Chatterjee^b

- ^a Regional Plant Resource Centre, Nayapalli, Bhubaneswar 751015, India. E-mail: sunita_bhatnagar@hotmail.com
- ^b Central Drug Research Institute, Lucknow 226001, India
- * Author for correspondence and reprint requests
- Z. Naturforsch. 61c, 285-288 (2006); received August 11/September 16, 2005

The role of vitamin A was evaluated for its chemotherapeutic and chemoprophylactic action against *Acanthocheilonema viteae* infection in *Mastomys coucha*. Vitamin A was administered for 10 days, five days before infection and five days post infection. On day 0 experimental animals as well as controls were infected with L3, the infective stage. Establishment of the worms revealed significantly less percentage of worm recovery over untreated controls. Cell-mediated response was found to be the cause of this reduction in worm recovery, whereas humoral response was not significant as lgG, lgA and lgM titres were low.

Key words: Acanthocheilonema viteae, Mastomys coucha, Vitamin A