

## **The effect of *Schistosoma mansoni* infection on testicular lipid in mice.**

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### **Abstract**

This study was performed to establish the changes in the level of some serum hormones (Follicle stimulating hormone "FSH", Leutinizing hormone "LH" and testosterone) as well as to determine the changes in the concentrations of some testicular lipid parameters (viz., total cholesterol and total triacylglycerols) of infected mice with *Schistosoma mansoni* for different periods of time. Electron microscopical studies were also performed to define any histological changes in the testis upon infection with *S. mansoni*. The serum levels of gonadotropins (FSH, LH) showed no significant changes in infected as compared to control mice. On the other hand, the serum level of testosterone showed a significant decrease ( $P < 0.001$ ) in infected as compared to control mice starting from the 14th week post infection. Testicular lipids showed a significant increase ( $P < 0.01$ ) in the concentration of total cholesterol and a significant decrease ( $P < 0.005$ ) in the concentration of total triacylglycerols in infected as compared to control mice especially at late stages on infection (14-20 weeks post infection). However, electron microscopical studies showed non significant histological changes in the testicular tissues of infected mice at different stages of infection. It is concluded that schistosomiasis has an important metabolic effect on testicular lipids as well as on the serum level of testosterone, whereas structural changes and spermatogenesis might require a longer period of infection and/or severe infection with higher number of cercariae