

# LH and testosterone profiles in male New Zealand rabbits experimentally infected with *Schistosoma mansoni*

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## **Abstract:**

The effects of *Schistosoma mansoni* (*S. mansoni*) infection on plasma levels of bioactive luteinising hormone (LH) and testosterone in the New Zealand rabbit model were studied. *S. mansoni* infection significantly decreased the pulse frequency ( $P < 0.05$ ), amplitude ( $P < 0.05$ ), area under LH curve ( $P < 0.05$ ) and mean plasma LH concentrations ( $P < 0.05$ ) on days 42 and 70 post-infection, as compared to values for day 14 pre-infection. Areas under the response curves for plasma testosterone levels decreased significantly ( $P < 0.05$ ) on days 42 and 70 post-infection in infected animals compared to day 14 pre-infection. In the praziquantel-treated group, the levels of LH and testosterone remained unchanged throughout the experimental period. The pulsatile secretion of LH was completely inhibited in *S. mansoni*-infected animals 70 days post-infection. These results suggest that the effects on reproductive gonadal hormones caused by *S. mansoni* in the rabbit model may partly be induced by alteration in pituitary synthesis or release of LH.