

MODULATION OF MACROPHAGE ACTIVITY, INDUCED BY β -1,3 POLYGLUCOSE EXTRACTED FROM *Saccharomyces cerevisiae*, IN BALB/C MICE INFECTED WITH *Toxoplasma gondii*.

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ABSTRACT: *Toxoplasma gondii* is an extremely widespread parasite that chronically infects approximately 20% of the world's population. β -glucan has been described as a potent immunomodulatory substance. The aim of this work was to evaluate the effects of β -glucan on the macrophage activity in mice infected with *T. gondii*. BALB/c mice were infected with 10^4 tachyzoites/ml by the intraperitoneal (ip) route. The suspension of β -glucan used in this study was extracted from the cellular walls of *Saccharomyces cerevisiae*. The animals received 100 μ g of glucan by ip route. Hydrogen peroxide (H₂O₂) and nitric oxide (NO) production by peritoneal and splenic macrophage cultures were determined by phenol red oxidation and Griess reaction, respectively. The results showed that β -glucan has a potent immunomodulatory effect in animals infected with *T. gondii*, and could be useful in the treatment of this zoonosis.

KEY WORDS: *Toxoplasma gondii*, BALB/c mice, β -glucan.

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