PARTICIPATION OF PLATELETS IN PROTECTION AGAINST *TAENIA TAENIAEFORMIS* INFECTION IN THE MOUSE INTERMEDIATE HOST

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C. B-17 *scid* mice, which are deficient in functional T and B lymphocytes, were found to be susceptible to *Taenia taeniaeformis* infection as intermediate hosts. However, C. B-17 normal mice were resistant to similar infection. Using this model, the participation of mouse platelets in the protection against metacestode stage of *T. taeniaeformis* infection was investigated.

C. B-17 *scid* mice (susceptible) were passively protected against challenge infection with *Taenia taeniaeformis* by the transfer of platelets from *T. taeniaeformis*-infected C. B-17 normal mice (resistant). The passive transfer of immune platelets from mice on day 13, 18, and 36 after infection led to protection of the recipient mice, with 61, 47, and 8% reduction in the total number of hepatic cysts 20 days after infection, respectively, as compared with control mice injected with the same number of uninfected mouse platelets. Judging from the macroscopic lesions in the liver, protection by immune platelets took place during the early stage of the infection.

Also, it was shown by ELISA that the change in IgG titer of the infected donor mice against the oncospheres corresponded directly to the protection in the recipient mice with transferred immune platelets. From the above results, it is postulated that platelet-mediated cytotoxicity may participate in the protective mechanism against *T. taeniaeformis* infection in mice.