Abstract

The Kilham rat virus (KRV) is a parvovirus originally isolated from a rat sarcoma in the late 1950s. The clinical signs associated with a natural KRV infection include foetal resorption in dams, runtin, ataxia, cerebellar hypoplasia and jaundice in suckling rats, and sudden death, scrotal cyanosis, abdominal swelling and dehydration in juvenile rats. The ability of this virus to produce persistent infections has resulted in a high frequency of contamination of cell cultures and transplantable-tumor system. In addition, the virus may interfere with research in other ways. The remarkable resistance to environmental conditions determines the importance of the detection and control of this agent, especially in the laboratory animal production. This study determines the seroprevalence of Kilham antibodies from sera of adult rats from conventional facilities, using the haemagglutination inhibition test. The seroprevalence varied between 27.8% and 75%. This result confirms that the virus is circulating in Argentinean conventional facilities and might be interfering with research. The recognized Kilham virus may be prevented from supply sources by implementing a health monitoring schedule including a regular serological surveillance, and by keeping the animals under barrier systems.

Keywords

Diagnosis, haemagglutination inhibition test, Kilham rat virus.