

PREVALENCE OF LYME BORRELLIA IN TICKS IN BRATISLAVA, SLOVAK REPUBLIC

M. Drgonová¹, J. Řeháček²

¹ Clinic of Infectious and Parasitic Diseases, Déřer's Hospital, Bratislava

² Institute of Virology, Slovak Academy of Sciences, Bratislava, Slovak Republic

SUMMARY

A total of 2857 unfed *Ixodes ricinus* adult ticks were collected in 2–3 week intervals in 1991 in Bratislava to survey their prevalence with spirochaetes. Five hundred twenty eight, i.e. 17.8 % harboured borreliae as detected by dark field microscopy. The infection rates of examined ticks varied from 15.3 to 21.8 % in females and from 14.5 to 16.9 % in males. The infestation of ticks was related to the season of their collection, the highest being in summer months. At this time the highest number of spirochaetes per tick was seen, too. Tick infestation with spirochaetes in March and April 1991/92 and 1992/93 at 13 and 9.3 % respectively, indicated borreliae do hibernate in these arthropods. The strain isolated from two females collected in October 1992 was determined by PCR typing as *Borrelia garinii*. Out of 371 patients suspected in Déřer's Hospital, Bratislava, from Lyme disease, 81 (21.8 %) had antibodies to *B. burgdorferi*. This demonstrates the presence of Lyme disease in Bratislava with *Ixodes ricinus* ticks being probably a vector of that spirochaetosis.

Key words: *Ixodes ricinus* ticks, borreliae, Bratislava

Address for correspondence: M. Drgonová, Clinic of Infectious and Parasitic Diseases, Déřer's Hospital, Limbová 5,
833 05 Bratislava, Slovak Republic