

M. Grešíková: Studies on tick-borne arboviruses isolated in Central Europe.

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The research on tick-borne encephalitis has a more than 25-year-long tradition in Czechoslovakia. It was in 1948 when Gallia first succeeded in isolating the virus. The long studies, both of our and foreign authors, during the quarter of a century accumulated a wealth of new information on ecology and epidemiology of this disease and further viruses were isolated from ticks. At present three tick-borne arboviruses are known from Central Europe. They belong to three different groups: tick-borne encephalitis (B-group), *Tribeč* (Kemerovo) and *Uukuniemi* (Uukuniemi).

The author of this volume, a long-term staff member of the Virological Institute, Slovak Academy of Sciences in Bratislava, aimed at compiling the most important facts on separate viruses, their relationship to vectors, reservoirs as well as their role in the epidemiology of human diseases, as are apparent at the present state of our knowledge. For this reason Chapter 1, devoted to the virus of tick-borne encephalitis (pp. 9—56) and divided in 3 subchapters, is most extensive. The first of these deals briefly with the characteristics of the virus (morphology, chemical composition, physical-chemical and culture properties, pathogenicity), the second subchapter discusses ecological aspects of the virus, its relationship to ticks, reptiles, birds and mammals. It also discusses the results of isolation tests in different types of elementary foci in Central Europe, the survival of virus, the transstadial and transovarial transmission in vectors, the results of experiments on viremia and of serological examination in different classes of vertebrates and their role in

maintaining the virus in nature. The third subchapter concerns some epidemiological problems relating to tick-borne encephalitis, such as excretion of the virus in the milk of infected goats, sheep and cows, the occurrence of antibodies in domestic animals, characterization of cases of human infection, epidemiological surveys from different regions and control measures.

The chapters 2 and 3 devoted to the viruses *Tribeč* (pp. 57—70) and *Uukuniemi* (pp. 71—81) are subdivided in a similar way. The conciseness of these chapters confirms the fact that due to a short period since the first isolation of these viruses there are still many problems unsolved in this field. For the time being both viruses seem to be of a negligible importance for human health. The occurrence of antibodies to the *Tribeč* virus in the area of its circulation is low and apparently the infection manifests itself subclinically. The situation concerning the *Uukuniemi* virus is similar.

The book includes a summary, a list of basic references, two-page Czech and Russian abstracts and a number of diagrams and photographs. Within its scope the treatise naturally cannot cover the whole range of problems and directs attention only to some aspects, especially those, which the author herself helped to solve. Many of these, which are not discussed here, are dealt with in more detail in literature cited. The tables and figures suitably accompany the text. The volume will serve as a good source of information to all who are engaged in the studies in this line.

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