Characteristics of rabies exposures in Finnish inhabitants

Rabies is a fatal form of encephalitis, which is caused by viruses of Lyssavirus genus. More than 55 000 human rabies deaths are estimated to occur annually worldwide. Since March 1991, Finland has been a rabies free country. However, high prevalence of rabies in Baltic countries and Russia pose a risk for rabies reintroduction in Finland.

National Infectious Disease Registry (NIDR) is administrated by National Public Health Institute in Finland. Legislation requires suspected rabies exposures to be reported into NIDR? (tätä ei sanota laissa selvästi:laki 1986/583, tartuntatautiasetus 1986/786. During 27.5.1994-1.9.2006, 208 suspected human rabies exposures were reported. The characteristics of exposures are presented according to age, gender, source country and exposing animal.

During the years 1994-2006, approximately 16 (min 4, max 29) suspected rabies exposures have been reported into NIDR yearly. The number of reported suspicions is in line with the amount of post-exposure treatments given (approximately 10 doses of combined rabies vaccine and immunoglobulin treatments/year; Rimhanen-Finne et al., 2007).

Twice as many suspected exposures occur abroad than in Finland (Figure 1), Thailand being the country of most foreign exposures (Table 1). The most common exposure is dog bite (101 cases), dogs being the most common exposing animals both in Finland and abroad (Figure 2). After dogs, monkey is the second most common exposing animal (28 cases) in foreign countries.

Gender seems not to affect the risk of suspected rabid attack: as many female (104) and male (104) exposures were reported to NIDR. The typical victims of suspected rabid attacks are females of 20-29 years old and males aged 40-49 years.

Although rabies is considered mainly a traveler's disease, infection pressure from neighboring countries demands actions to control the disease in Finland. In 2003, an imported horse case was detected in Finland. Surveillance and monitoring of animal rabies is carried out by Finnish Food Safety Authority. On south eastern border, rabies bait vaccination of wild animals is performed twice every year.



