CASE REPORT (2) – CHINA

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China has been the country reporting the second largest number of human rabies deaths worldwide since the late 1990s. The disease is predominantly distributed in south China with more than 85% of human rabies cases from rural areas. The latest epidemic wave of human rabies started in 1997 with 222 cases, reaching its peak in 2007 with 3303 cases. Currently 23 of the 31 provinces, autonomous regions and municipalities have reported human rabies cases. With the implementation of comprehensive control measures around 2005, reported human rabies cases have been significantly declining, with 2378 cases in 2008, 2108 in 2009, and 1927 in 2010.

Since the wide prevalence of dog rabies caused by very low vaccination coverage, the dog plays a pivotal role in rabies transmission in China with more than 95% of human cases ascribed to dog bites. Dog management and mass vaccination in rural area are main challenges in combating rabies in China. In contrast to urban areas, where a well-established dog registration and vaccination programme is in place, ensuring adequate immunization coverage of urban dogs, dogs in rural areas do not require registration and their vaccination is not widely accepted due to poor awareness and the high cost of vaccine administration. Therefore the immunization coverage in rural areas is commonly low and highly dependent on the economic status of the local government.

Phylogenetic analyses showed that rabies viruses isolated in China have a close relationship with those from Southeast Asia and are divided into 3 major groups. Current control measures consist of compulsory registration and vaccination of companion dogs in urban districts, gradual implementation of mass vaccination of rural dogs, increased post-exposure treatment of dog-injured people, particularly in rural areas, awareness education, and improvement of medical and veterinary infrastructures.