Reviewer's report

Title: Epidemiological investigations of human rabies in China

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Authors of the present manuscript, Miao Song, Qing Tang, Ding-Ming Wang, Zhao-Jun Mo, Shou-Heng Guo, Hao Li, Xiao-Yan Tao, Charles E. Rupprecht, Zi-Jian Feng, and Guo-Dong Liang, have analyzed human rabies data collected at the Chinese Center for Disease Control and Prevention (China CDC). Data analysis has revealed that 14 065 cases of human rabies have been reported during this period of time, with the majority of cases occurred among students, rural population and unattended children. 50% of cases have been registered in Guangxi, Hunan and Guizhou provinces.

To investigate the status of dogs and post-exposure prophylaxis (PEP) randomly selected brain specimens of domestic dogs have been laboratory tested, along with obtaining of the demographic data of patients (name, gender, age, occupation), exposure status (according to exposure site and degree) and PEP of patients within 2005-2006 in Guangxi, Hunan and Guizhou provinces.

Authors have indicated that during recent years prevalence of the disease has been expended to west and north parts of the country. Analysis of PEP at Guangxi, Hunan and Guizhou provinces, has clearly revealed low rate of PEP, that is the result of low level of public education on rabies, and the major factor leading to high incidence rate of human rabies in these provinces. An adequate management and vaccination of dogs, increased awareness and better education of public in this subjects, as well as increased financial support from the government to support PEP, will significantly reduce the rate of human exposure.

Results, obtained from the investigation and analysis of the rabies spread in dogs, have shown that rate of rabies infection in dogs is 8,2% (95% CI: 7,2% – 9,2%). This value indicates that study is reliable, valid and that high rate of human rabies could be in direct correlation with high rate of this infection in dogs.

In general, study results are trustworthy and can be used as the basis for the development of an appropriate prevention plan.