Gene Characteristics of Adults Measles Virus’ Nucleoprotein in Jilin province, China, 2001-2016

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Measles is a vaccine-preventable disease. World Health Organization recommend two doses measles and measles-containing vaccines for infants and children, especially in the measles elimination stage, it should achieve at least 95% coverage by end 2020. However, many adults have unknown vaccination history, adults measles or adults measles outbreaks never stop in the worldwide. The morbidity of adults' measles in Jilin province has increased year by year from 2001 to 2016. We got 90 adults' measles virus strains from 2001-2016, they are all H1a genotype after sequencing their nucleotides based on the N450. We chose 26 representative measles virus strains to analyse. The nucleotides and amino acid homology of N protein kept decreasing trend to compare with both Chinese vaccine strain S191 and the H1a representative strain. The number of mutational sites of amino acid was growing obviously. There were a higher entropy value and variability of amino acid at sites 48, 78, 83, 110, 118, 123, 137 and 148 in N protein. Among these 26 representative measles virus strains, the nucleotides and amino acid homology of N protein showed a gradually decreasing tendency, and there are more and more mutational sites of amino acid. During the measles elimination stage, we not only work out the immunization strategy based on the serology and epidemiology for controlling the incidence of adults' measles but also enhance & continue to monitor the variation situation of N protein of adults' measles virus.

Biography

Shuang Wang has completed her MD at the age of 24 years from Jilin Medical College and visiting scientist in UTH at Houston in 2013.10-2014.11. She is a professor at public health field and the director of vaccine-associated diseases in Jilin Provincial CDC, China. She has published more than 60 papers in reputed journals and has been serving as Peer Reviewer for International Society for Disease Surveillance (2016 Annual Conference-Atlanta).

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