研究業績　英文表記

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Title	Continued Circulation of G12P[6] Rotaviruses Over 28 Months in Nepal: Successive Replacement of Predominant Strains
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Abstract	Rotavirus A causes severe diarrhoea in infants and young children worldwide. The migration pattern (electropherotype) of the double-stranded RNA genome upon polyacrylamide gel electrophoresis has been used to define “strains” in molecular epidemiology. In temperate countries, distinct electropherotypes (strains) appear after the annual, off-seasonal interruption of rotavirus circulation. In Nepal, rotavirus circulated year-round and an uncommon genotype G12P[6] predominated and persisted, providing a unique opportunity to examine whether the same electropherotype (the same strain) persisted or new electropherotypes (new strains) emerged successively under the same G12P[6] predominance. A total of 147 G12P[6] rotaviruses, collected from diarrhoeal children in Nepal between 2007 and 2010, were classified into 15 distinct electropherotypes (strains). Of these, three electro-pherotypes (strains), LP1, LP24, and LP27, accounted for 10%, 32% and 38% of the G12P[6] rotaviruses, respec- tively. Each of the three major strains successively appeared, dominated, and disappeared. This study provided new evidence for the hypothesis that rotavirus constantly changes its strains to predominate in the local population even under conditions where a single genotype predominates and persists. Such dynamic strain replacement, the constant takeover of one predominant strain by another, fitter strain, is probably gives a competitive edge to the survival of rotavirus in nature.
keyword	rotavirus, strain, electropherotype, genotype, molecular epidemiology

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