<誌上発表>

○Laboratory-based surveillance of pertussis using multitarget real-time PCR in Japan: evidence for *Bordetella pertussis* infection in preteens and teens

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Between January 2013 and December 2014, we conducted laboratory-based surveillance of pertussis using multitarget real-time PCR, which discriminates among *Bordetella pertussis*, *Bordetella parapertussis*, *Bordetella holmesii* and *Mycoplasma pneumoniae*.

Of 355 patients clinically diagnosed with pertussis in Japan, *B. pertussis*, *B. parapertussis* and *M. pneumoniae* were detected in 26% (n = 94), 1.1% (n = 4) and 0.6% (n = 2), respectively, whereas *B. holmesii* was not detected. It was confirmed that *B. parapertussis* and *M. pneumoniae* are also responsible for causing pertussis-like illness. The positive rates for *B. pertussis* ranged from 16% to 49%, depending on age. Infants aged ≤ 3 months had the highest rate (49%), and children aged 1 to 4 years had the lowest rate (16%, $p < 0.01$ vs. infants aged ≤ 3 months). Persons aged 10 to 14 and 15 to 19 years also showed high positive rates (29% each); the positive rates were not statistically significant compared with that of infants aged ≤ 3 months ($p \geq 0.06$). Our observations indicate that similar to infants, preteens and teens are at high risk of *B. pertussis* infection.

○Defining the Genome Features of *Escherichia albertii*, an Emerging Enteropathogen Closely Related to *Escherichia coli*

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Escherichia albertii is a recently recognized close relative of *Escherichia coli*. This emerging enteropathogen possesses a type III secretion system (T3SS) encoded by the locus of