

Abstract

Pertussis is an acute respiratory tract illness results from Bordetella pertussis. Owing to the wide use of pertussis vaccine in Taiwan for the past 40 years, there have been decreases in the incidence of disease. But the incidence of pertussis has been increased in recent years. The epidemics in Taiwan occur in 3- to 5-year cycles that are similar to United States. Because pertussis vaccine immunity is of limited duration (usually 3-12 years), the incidence of pertussis in adolescents and adults is increased in other country. Given the level of protection of the pediatric population and the underreporting of pertussis in older groups, it seems likely that the majority of pertussis cases occur in adolescents and adults. Infants who are not yet fully immunized, are at the greatest risk for morbidity and mortality from pertussis. Isolation of B. pertussis by culture in the setting of clinical illness is still considered the gold standard but is clearly limited in sensitivity. Polymerase chain reaction (PCR) has been applied to pertussis diagnosis in both investigational and routine clinical care settings and has been demonstrated to be both sensitive and specific.

In this study, 91 patients with cough lasting 1 week or longer were enrolled. The result showed that only one case was confirmed pertussis (PCR positive, culture negative). The case was an 11 year-old male and he had received pertussis vaccine before. The duration of cough was 11 days and the clinical diagnosis was upper respiratory tract infection. There is no enough data to show that the epidemics in Taiwan is different from other country. It is need further study to see whether adolescents or adults should receive a booster dose of pertussis vaccine.

Keywords: pertussis ; polymerase chain reaction (PCR) ; pertussis vaccine