

## Abstract

*Neisseria meningitidis* (*N. meningitidis*) is a nonmotile gram-negative coccus. To date, 13 different serogroups of meningococci have been identified. Meningococcus causes two major diseases, purulent meningitis and fulminant meningococemia, usually are caused by group A, B, C, W-135 and Y. Humans are the only reservoir of *N. meningitidis*. The peak incidence of meningococcal disease occurs at less than one year of age, old age group or specific sites including military, school or jail. The epidemiological data of meningococcus including incidence, age, distribution, serotype and antibiotic susceptibility was absent in this country. In otherwise, the nasopharynx carriage rate of *N. meningitidis* in children was also no information data. According to the different survey data from other countries, carriage rate of meningococcus in the infant or children are usually 1-15%. In recent 2 years, the meningococcus disease incidence increasing in Taiwan, In order to surveillance this bacteria, we conduct a prospective study to investigate the carriage rate, serotype, and antibiotic susceptibility of isolate strains in healthy children in Taiwan. During one year study, we collect nasopharyngeal specimen from 642 healthy children, only one non-typable *N. meningitidis* isolated from a 9-month-old infant. The carriage rate was 0.16%, the rate was lower than other epidemic or endemic countries. The antibiotic sensitivity test revealed that this strain only intermediate resistant to penicillin, but sensitive to other tested antibiotics. For these limited data, if further study want to conduct, we suggest prolong study duration and increasing study area, in order to get more epidemiological data of *N. meningitidis* in Taiwan.

**Keywords:** *Neisseria meningitidis*; antibiotic susceptibility; carriage rate; serotype