

SUMMARY

S U M M A R Y

Whooping cough is an infectious, contagious and communicable disease. It is mainly a disease of early childhood, most common in girls than boys, the opposite to most infectious diseases. Whooping cough can undoubtedly be an unpleasant disease with a variety of serious complications, since its management is not straight forward. Scientists don't adequately understand, how the disease develops or which components of the bacteria are toxic and which promote immunity. The hall mark of the disease is the whoop which is absent in mild atypical cases or infants and the infection may pass undiagnosed.

Neonatal pertussis have been reported, due to its atypical presentation, it is always missed. How this organism produces the most severe manifestations of pertussis at a time when it disappeared from the respiratory tract, still to be an unanswered question. The first description of whooping cough was first described by Guillaum de Baillon in 1578s, while J. Bordet & O. Gengou, in 1900s isolated the organism.

The aetiology of pertussis has been questioned in the past few years. However, the role of adenoviruses still controversial, while some investigators have reported other viral agents rather than adenoviruses in the

aetiology of whooping cough. It is advisable to consider the aetiology to be *B. pertussis* and assess other potentially pathogenic agents.

Relatively, little is known about the pathogenesis in pertussis, this may be due to the lack of a suitable animal model for laboratory studies. The observed limitation of *B. pertussis* invasion to superficial ciliated epithelia, remains unexplained.

Also, relatively, little is known about the mechanisms of immunity to pertussis. Although, pertussis toxin is a strong adjuvant, anti-L.P.F. and anti-F-HA, its role in protection against pertussis still under study.

The epidemiology of pertussis has been modified by immunization, but even prior to wide mass vaccination, it has displayed distinctive epidemiological characteristics. Mortality is greatest in infants under 6 mo of age. The decline in incidence in recent years could be attributed to other factors than vaccination, such as socioeconomic factors and improved medical care.

The clinical manifestations of whooping cough are well described but poorly understood. Classic pertussis, once seen, is unlikely to be missed. After an incubation

period of approximately 10 days, whooping cough results a prolonged course consisting of three overlapping stages.

Whooping cough results in many complications, respiratory, neurological, gastrointestinal, metabolic, nutritional and finally mechanical complications. The most common complication is pneumonia which is responsible for many deaths.

Whooping cough is a treatable bacterial disease. All infants under 1 year of age should be hospitalized. The goal of the physician should be to provide supportive care which remains the hall mark of therapy in infants at risk. Antibiotics, especially erythromycin 50 mg/kg for 14 days is helpful if given early in the catarrhal stage, as it eradicates *B. pertussis* and make the patient not contagious. Salbutamol have been provided to be beneficial. Corticosteroids are indicated only in severely ill infants combined with anti-biotics.

Prevention of the disease is achieved by vaccination. D.T.P. vaccine, to be effective, 80% of the child population must be vaccinated. Adverse local and systemic reactions may occur following receipt of D.T.P. vaccine, and in rare cases, it was associated with neurological brain damage.