

# **Pneumococcal Conjugate Vaccine (PCV) and Streptococcus Pneumoniae**

## **(Pneumococcal) Infection**

What is Streptococcus Pneumoniae?

Streptococcus Pneumoniae is a common bacterium residing in the nose or throat of many children. However, when a child's physical strength or immune system is weakened, the bacterium can enter the body and cause the child to get sick. In adults it often causes pneumonia, while in children, especially those under 5 years of age, it can attach itself to the membrane surrounding the brain and cause bacterial meningitis, which can be fatal. It can also cause pneumonia, severe otitis media and bacteremia.

Bacterial Meningitis

In Japan, there are about 200 cases a year of bacterial meningitis in children under the age of five caused by Streptococcus Pneumoniae. In Europe and America, however, the number of cases has been greatly reduced due to an effective childhood pneumococcal vaccine introduced from about the year 2000.

Early diagnosis is difficult because symptoms are similar to a common cold. It is only after more severe symptoms such as convulsions or impaired consciousness occur, that a diagnosis is made. Compared to meningitis caused by the *Haemophilus influenzae* type b (Hib) bacterium, the mortality rate and permanent side effects from pneumococcal meningitis are slightly higher at 10% and 30-40%, respectively. Permanent side effects may include hearing problems as well as developmental, mental or motility disorders.

What is the Pneumococcal Conjugate Vaccine (PCV)?

It is a vaccine that can prevent 90% of diseases caused by pneumococcal infection such as meningitis, bacteremia and severe pneumonia.

The childhood Pneumococcal Conjugate Vaccine (the inactivated vaccine **Prevenar**) finally became available in Japan in February of 2010. It can be administered to infants and children aged between 2 months and 9 years, but is particularly recommended for children under the age of five.

The number of times it is administered depends on the child's age. In babies aged 2-6 months it is administered 4 times. In babies aged between 7-11 months it is administered 3 times. In children aged 1 it is administered twice and for those between the ages of 2-9 years it is given just once. It can be given along with the DPT or Hib vaccine.

Side effects:

The most common side effects are redness or swelling at the injection site or a fever. In most instances the fever will go down after 1-2 days and the redness or swelling after 4-5 days.

Remember prevention is better than cure!

Have your child vaccinated!