

NOT JUST A COUGH

Don't ignore your child's nagging cough – it may not be just a scratchy throat, and can in fact, turn deadly.

In 2010, an outbreak of pertussis (commonly known as whooping cough) infected 9,143 in California and took the lives of 10 infants. It was a tragedy that shocked many. In this day and age, and in a first-world country like America, it seems unbelievable that whooping cough can afflict so many. This is the highest number of infections since 1947, when 9,394 cases were reported.

Closer to home, KK Hospital reported 45 cases of pertussis between 2004 to 2007 treated in the hospital, says Dr Liew Woei Kang, a paediatrician who specialises in allergy and immunology. There was a sharp hike in 2007, with 33 new cases reported, instead of the usual one or two cases in previous years. So yes, even Singapore, with our good medical records, is not immune to the dangers of pertussis.

WHAT IS PERTUSSIS?

"Pertussis is a highly contagious respiratory tract infection," explains Dr Liew. It is spread by airborne droplets from infected individuals and if left untreated, it can last for six weeks.

The symptoms in the initial (catarrhal) phase is just like the common cold, with runny and blocked nose, sneezing and low grade fever. The second (paroxysmal) phase comes with intense coughing bouts lasting up to several minutes. In young children, the coughs occasionally end with a "whoop" sound. Babies under six months do not have the characteristic whoop but may have irregular slow breathing or breathing pauses, and are at risk for exhaustion. Children may also suffer from post-tussive vomiting and turn red with coughing. In the third (convalescent), patients develop a chronic cough, which may last for weeks.

"Those most susceptible to pertussis includes infants less than six months old, infants born prematurely and patients with underlying heart, lung, brain or muscle diseases," says Dr Liew. He recalls the case of a two-month-old patient with severe pertussis infection who developed apnea. This happens when there are periods of pauses in the breathing, leading to the baby turning blue and having low oxygen in the blood. The infant needed intubation and ventilation support in the Intensive Care Unit for a couple of days, before they could stabilise the illness with treatment.



PERTUSSIS CAN BE PREVENTED

The fact is the child need not go through this, had he been vaccinated or did not catch the infection from an infected person. Pertussis was a major cause of morbidity and mortality among infants and children in the past but vaccinations can prevent that today. The diphtheria, tetanus and pertussis (DTaP) vaccine consists of killed bacteria proteins, that stimulate the immune system to produce protective antibodies against these bacteria. Since this vaccine was made available in the 1940s, Dr Liew says that reported cases of pertussis decreased by more than 99 per cent.

DTaP vaccination is in the National Childhood Immunisation Schedule of Singapore, and consists of three primary doses at ages two to four months, five to six months, and a booster dose at 18 months. Protection against typical disease wanes three to five years after vaccination. Hence, in 2011, the Ministry of Health (Singapore) recommended that the pertussis booster be administered at 10 to 11 years (Primary 5), in view of waning immunity and breakthrough infections. Booster doses may also be recommended for at-risk individuals once every decade, till he is 65 years old.

Another thing to note: when an adult has pertussis, the symptoms are not very serious, but it can be life-threatening in infants who have lower immunity. Hence, it is important to ensure that caregivers and those who have close contact with newborns, be vaccinated. This is called cocooning, a strategy to protect babies from being struck.

As the tragic epidemic in California shows, we should not take pertussis lightly. Imagine the unnecessary pain and anguish parents will put themselves through if their child is stricken with serious pertussis – especially since a life-saving vaccination is just a shot away.



CALL THE DOC!

Dr Liew Woei Kang is a paediatrician who specialises in Paediatric Allergy and Immunology. He manages conditions like: Allergy disorders such as eczema, food and drug allergy, allergic rhinitis, asthma, food and drug challenges, immunotherapy; Immunological disorders like primary immunodeficiencies and evaluation of recurrent infections; and

Rheumatological disorders such as Kawasaki disease, juvenile idiopathic arthritis and intra articular joint injections.

For appointments, call 6475 0820 or visit SBCC Baby & Child Clinic (Asthma, Lung, Sleep & Allergy Centre) #07-05 Gleneagles Medical Centre, 6 Napier Road.

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