DIPHTHERIA

WHAT IS DIPHTHERIA

Diphtheria is an acute infection caused by the bacteria *Corynebacterium diphtheriae*.

It can affect people of all ages, including children.

HOW IS DIPHTHERIA SPREAD

The bacterium that causes the illness is very common in the environment. It can live in the nasal passages of normal people, without causing any symptoms. Such persons are called *carriers*. The bacteria spreads from carriers and people who have diphtheria by way of respiratory secretions that get airborne. People who inhale these particles and are not immune can get diphtheria. It can also spread via direct contact with infected secretions from a patient.

WHAT ARE THE CLINICAL MANIFESTATIONS OF DIPHTHERIA

Diphtheria usually begins as a respiratory illness. The child may have cold symptoms, fever, cough, a hoarse voice and a sore throat. As the illness progresses, he may develop difficulty in swallowing or breathing difficulty. He may complain of general malaise and a headache. Frequently, a grayish white membrane will be seen in the throat. In late stages, the disease can affect the heart and kidneys and will cause symptoms related to these organs.

Occasionally, diphtheria can infect the skin and form an ulcer – it is usually quite difficult to identify that the ulcer is caused by the diphtheria bacterium.

IS DIPHTHERIA DANGEROUS

Diphtheria can be extremely dangerous if not treated early and appropriately. Approximately 10% of patients with diphtheria will die.

HOW IS DIPHTHERIA TREATED

Once the diagnosis has been made, the child has to be admitted to hospital. The doctor will ask for cultures from the throat to check for the bacteria. These cultures may not always be positive because it is difficult to grow the organism in the laboratory. He will need antibiotics active against the bacteria. He will also need to be given diphtheria anti-toxin to neutralize the toxin produced by the bacteria. It is this toxin that is responsible for many of the complications of the disease and the sooner anti-toxin is administered, the better.

Complications of diphtheria, like heart failure, will have to be treated accordingly.

One of the major problems with diphtheria is that the membrane it forms can obstruct the breathing passage and cause suffocation. If this is imminent, the child will have to be shifted to the Intensive Care Unit and may require a breathing tube to bypass the obstruction.

Close family and others exposed to the patient will also need to be treated to prevent them from getting the disease.

WHAT ARE THE COMPLICATIONS OF DIPHTHERIA

The illness can cause airway obstruction because of the thick membrane, as already explained.
In addition, the toxin produced can affect many organs, including the heart, kidneys and central nervous system.

It can cause various cardiac complications, including heart failure and rhythm disturbances. It can cause kidney failure of varying degrees. It can affect many nerves and cause paralysis of individual nerves. Many of these complications will resolve with time, if the patient survives.

HOW CAN DIPHTHERIA BE PREVENTED

The vaccination for diphtheria is very effective and is part of the childhood immunization schedule. The vaccine, called DPT, or Triple Antigen, protects against Diphtheria, Pertussis (Whooping Cough) and Tetanus. Three doses are to be given in the first year of life, followed by two boosters before the age of 5 years. It is extremely important that your child receive all these doses.