

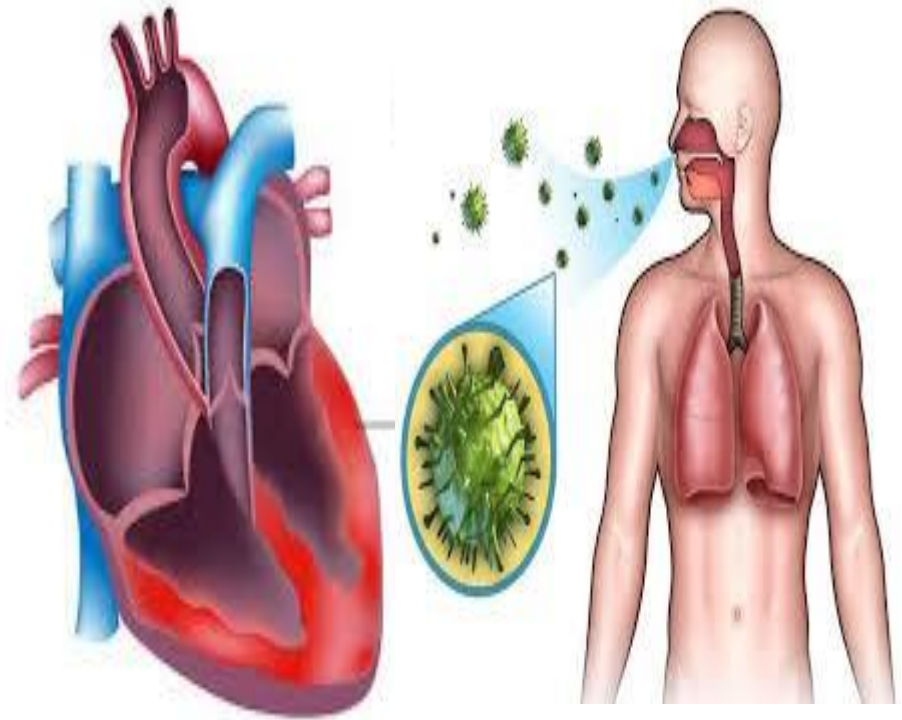
Definition

- is acute bacterial disease of tonsils , pharynx, larynx, nose , skin and sometimes the conjunctiva or genitalia. It's caused by a bacterium called *Corynebacterium diphtheria*. It can be treated by special drugs, or by antibiotics. There is a vaccine which can prevent diphtheria.



Diphtheria can cause serious problems, like:

- a) Inflammation of the heart, which can lead to death
- b) Different forms of paralysis, by poisoning of nerve cells
- c) Pneumonia
- d) Encephalitis
- e) Problems with the kidneys

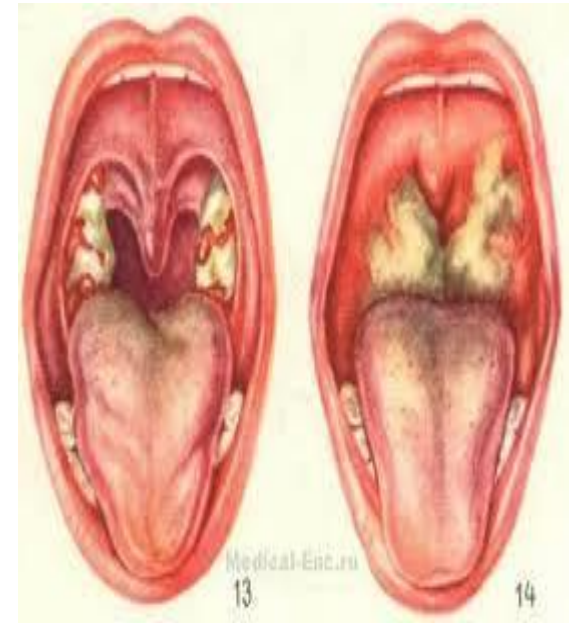


Signs and symptoms of diphtheria.

- Usually begin two to five days after a person gets infected.

They may include:

1. A thick, gray membrane covering the throat and tonsils
2. A sore throat and a hoarse voice
3. Swollen glands (enlarged lymph nodes) in the neck
4. Trouble breathing, or fast breathing
5. Nasal discharge
6. Fever and chills
7. Malaise (feeling very tired and not having any energy)



Categories of diphtheria

1. **Coetaneous diphtheria:-** A second type of diphtheria can affect the skin. This type of diphtheria is called coetaneous diphtheria. It causes pain, redness, and swelling on the skin, like other bacterial skin infections. People with coetaneous diphtheria may get **ulcers**, covered by a gray membrane, on their skin.
2. **Anterior nasal diphtheria:-** The onset of anterior nasal diphtheria is indistinguishable from that of the common cold and is usually characterized by a mucopurulent nasal discharge (containing both mucus and pus) A white membrane usually forms on the nasal septum.



Categories of diphtheria:-

3- Pharyngeal and Tonsillar Diphtheria:- The most common sites of diphtheria infection are the pharynx and the tonsils. Infection at these sites is usually associated with substantial systemic absorption of toxin. The onset of pharyngitis is insidious. Early symptoms include malaise, sore throat, anorexia, and low-grade fever ($<101^{\circ}\text{F}$). Within 2–3 days, a bluish-white membrane forms and extends, varying in size from covering a small patch on the tonsils to covering most of the soft palate. Often by the time a physician is contacted, the membrane is grayish-green, or black if bleeding has occurred.

4- Laryngeal Diphtheria:- Laryngeal diphtheria can be either an extension of the pharyngeal form or can involve only this site. Symptoms include fever, hoarseness, and a barking cough. The membrane can lead to airway obstruction, coma, and death.



Treatment of diphtheria

- **Antitoxin** :- injected into vein or muscle ,neutralizes diphtheria toxin already circulating in the body. Before giving antitoxin should be perform skin allergy test
- **Antibiotics**:- diphtheria is also treated with antibiotics such as penicillin or erythromycin . antibiotics help kill bacteria in the body , clearing up infections. Antibiotics reduce to just few days the length of time that person with diphtheria is contagious



Complication of diphtheria

1. Myocarditis
2. Heart failure
3. Neuritis such as Paralysis of the soft ,Paralysis of eye muscles, limbs, and diaphragm
4. Pneumonia
5. Respiratory failure
6. Otitis media and respiratory insufficiency due to airway obstruction, especially in infants
7. Death.

