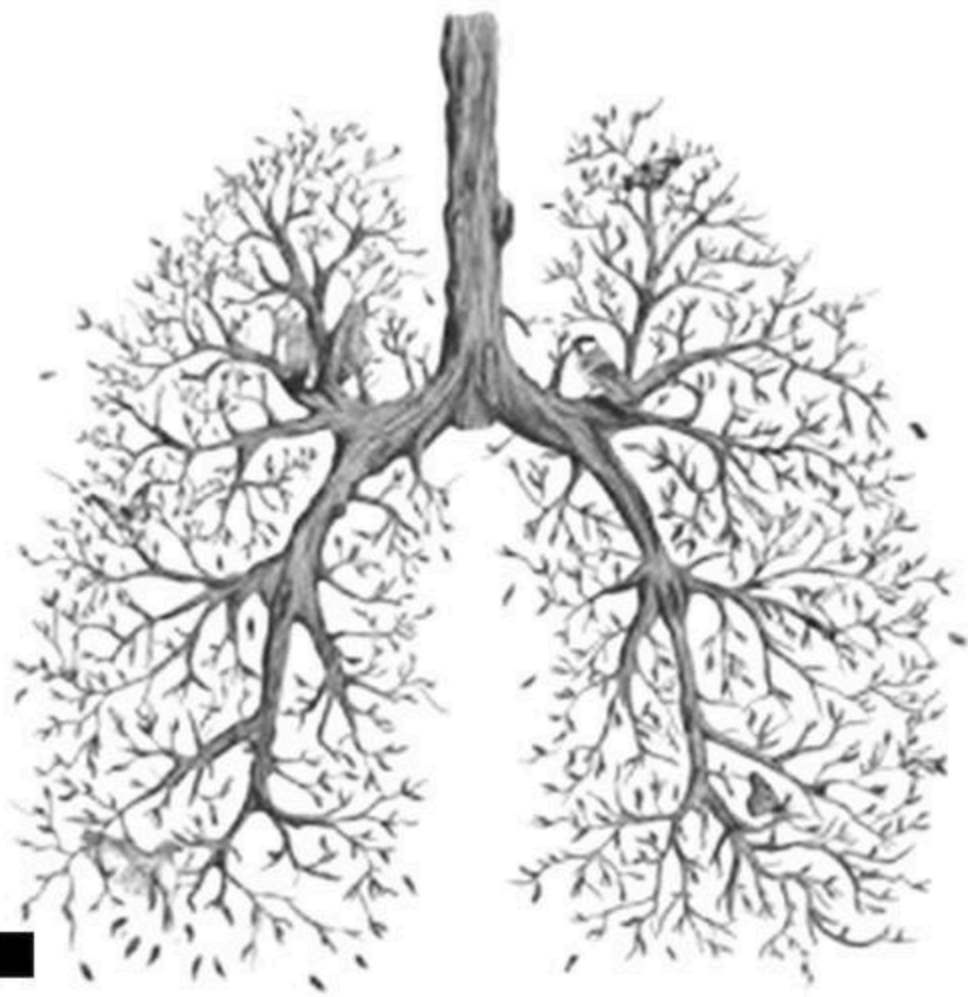


By Mohamed F. Abu Alia



Medical Committee
The University of Jordan

Community Medicine



Slides

Sheet

Lecture # 4

Doctor: Samr Al sharif

Date:

Diphtheria

- can cause serious illness
- kills 1 of 10 people infected with it
- **Diphtheria bacteria**
 - lives in mouth, nose, and throat of an infected person spreads through droplet infection.
- If not treated, the child could die from suffocation

Diphtheria

- **Once infected** :The incubation period is two to seven days, with an average of three days.
- **Symptoms**
 - some people might not feel any thing or just look sick
 - others might have
 - sore throat
 - fever
 - chills
 - difficulty swallowing
 - thick gray coating over the back of the throat

Complications

- within 6-10 days serious problems can occur
 - suffocation
 - paralysis
 - heart failure (myocarditis)
 - coma
 - death

Treatment

- **Antitoxin**
- The most important step is prompt administration of diphtheria antitoxin, without waiting for laboratory results.
- **Antibiotics**
are given to wipe out the bacteria, to prevent the spread of the disease, and to protect the patient from developing pneumonia.

Isolation of patients

- Diphtheria patients must be isolated for one to seven days or until two successive cultures show that they are no longer contagious. Children placed in isolation are usually assigned a primary nurse for emotional support.

Identification and treatment of contacts

- Because diphtheria is highly contagious and has a short incubation period, family members and other contacts of diphtheria patients must be watched for symptoms and tested to see if they are carriers. They are usually given antibiotics for seven days and a booster shot of diphtheria/tetanus toxoid.





Tetanus

- Is a medical condition characterized by a prolonged contraction of skeletal muscle fibers. The primary symptoms are caused by tetanospasmin, a neurotoxin produced by the Gram-positive, rod-shaped, obligate anaerobic bacterium *Clostridium tetani*

Tetanus

- **Once infected: Incubation period**
- The incubation period of tetanus may be up to several months but is usually about eight days.
- **Symptoms**
 - stiff muscles in the jaw and neck with difficulty swallowing
 - difficulty opening mouth
 - muscle rigidity in the arms, legs, and stomach with painful convulsions

Tetanus

- **Complications**
 - broken bones from muscle spasms
 - breathing problems/lung infections
 - coma and death
- child has painful muscle spasms from tetanus
 - nearly impossible for her to move or control the muscles in her body

Tetanus

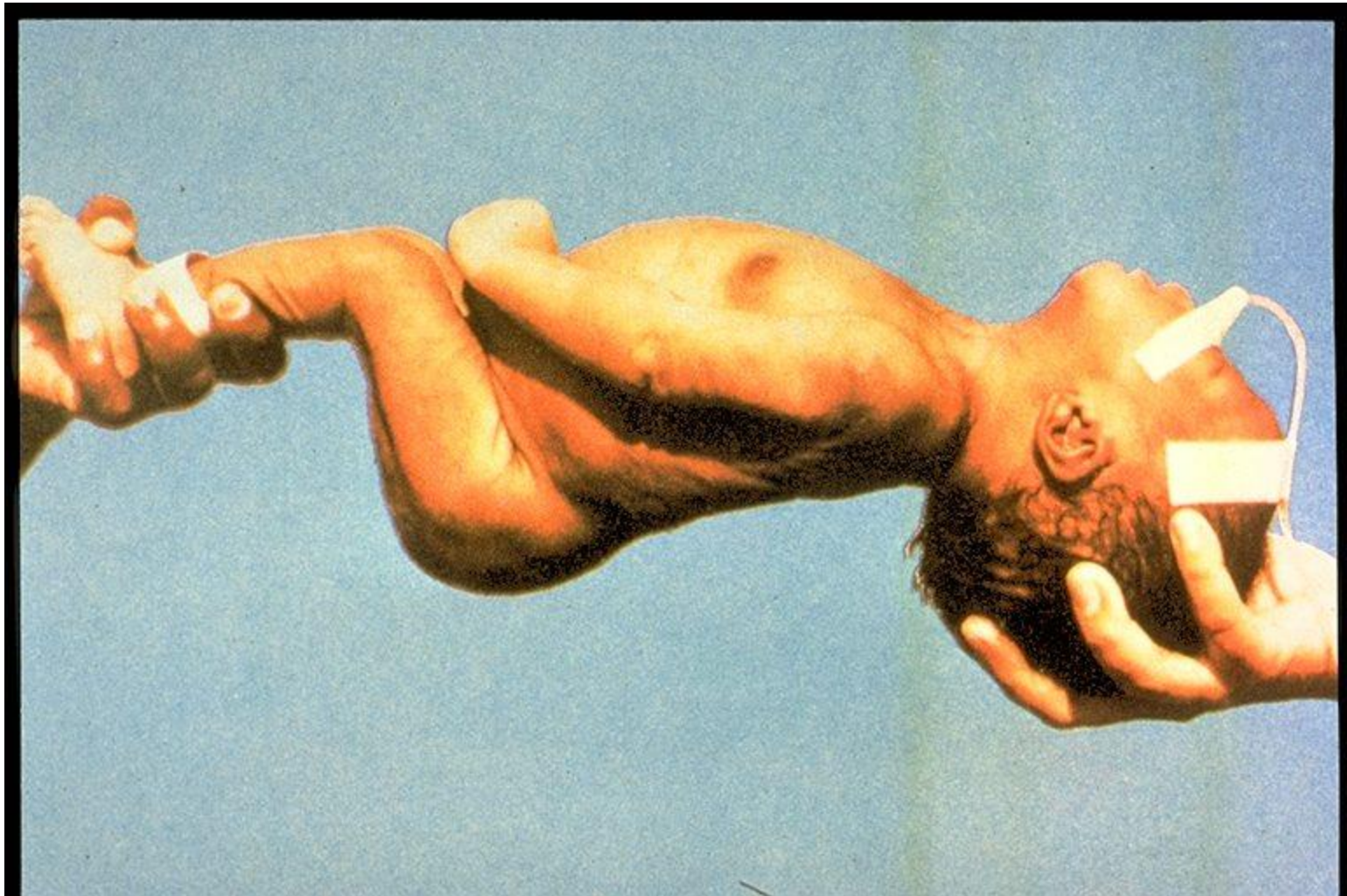
- baby has tetanus cannot breast-feed or open his mouth because the muscles in his face have become so tight
- **Tetanus**
 - can cause serious illness and death
- **Tetanus bacteria**
 - lives in dirt and the intestines and feces of animals
 - enters the body through cuts, punctures, or other wounds

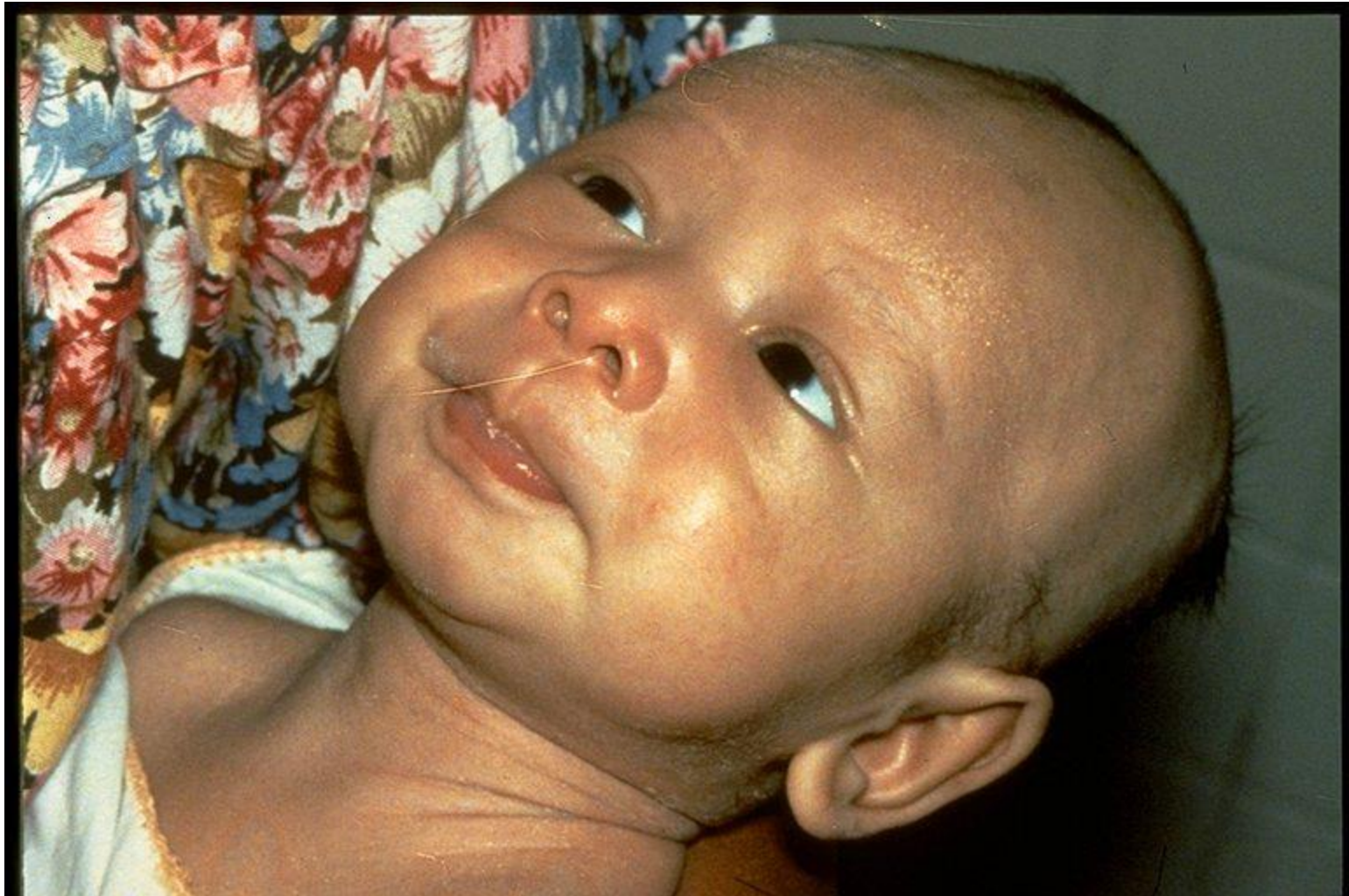
- baby has neonatal tetanus; baby is completely rigid
- tetanus kills most babies who get it
- infection can happen when newly cut umbilical cord is exposed to dirt

Treatment

- Anti -toxins
- tetanus immunoglobulin IV or IM
- metronidazole IV for 10 days
- diazepam







Pertussis

- — commonly called **whooping cough**
- — is a highly contagious bacterial disease caused by *Bordetella pertussis*. In some countries, this disease is called the 100 days' cough or cough of 100 days.[\[1\]](#)

Pertussis

- Symptoms are initially mild, and then develop into severe coughing fits, which produce the namesake high-pitched "whoop" sound in infected babies and children when they inhale air after coughing. [\[2\]](#) The coughing stage lasts approximately six weeks before subsiding.

Pertussis

- Prevention by [vaccination](#) is of primary importance given the seriousness of the disease in children.[3] Although treatment is of little direct benefit to the person infected, [antibiotics](#) are recommended because they shorten the duration of infectiousness.[3] It is estimated that the disease currently affects 48.5 million people yearly, resulting in nearly 295,000 deaths.[4]

Pertussis

- **Pertussis**

- serious disease especially for babies
- most babies who get pertussis have to be hospitalized and some even die

Pertussis germ

- lives in the mouth, nose, and throat
- spreads through coughing and sneezing
- spreads very easily from parent to child or child to child

Pertussis

Once infected

- takes 5-10 days to get sick

Symptoms

- adults usually do not get very sick
- children can have
 - fever
 - coughing
 - severe cough with a "whooping" sound
 - vomiting and exhaustion after severe coughing
 - difficulty breathing

Complications

- pneumonia
- seizures
- brain damage
- death

Children under 7 years of age need to be vaccinated against pertussis.

Prevention

- The primary method of prevention for pertussis is vaccination. There is insufficient evidence to determine the effectiveness of antibiotics in those who have been exposed but are without symptoms.[\[7\]](#) Prophylactic antibiotics, however, are still frequently used in those who have been exposed and are at high risk of severe disease (such as infants).[\[3\]](#)

- Antibiotics decrease the duration of infectiousness and thus prevent spread.[\[3\]](#)
- The antibiotic [erythromycin](#) or [azithromycin](#) is a front line treatment[\[7\]](#)

