# Tonsillitis and pharyngitis

## *Executive summary*

## Introduction

Pharyngitis is an inflammation of the pharynx involving lymphoid tissues of the posterior pharynx and lateral pharyngeal bands. The etiology can be bacterial, viral and fungal infections. Most cases are due to viral infections and accompany a common cold or influenza. Respiratory disease caused by group A strep infection in children younger than 3 years old rarely manifests as acute pharyngitis. These children usually have mucopurulent rhinitis followed by fever, irritability, and anorexia (called “streptococcal fever” or “streptococcosis”). In contrast to typical acute group A strep pharyngitis, this presentation in young children is subacute and high fever is rare.

## Target users

* Doctors
* Nurses

## Target area of use

* Gate clinic
* Outpatient department
* Ward

## Key areas of focus / New additions / Changes

This guideline outlines the diagnosis and treatment of pharyngitis – particularly emphasizing how to decide when antibiotics are appropriate.

## Limitations

Facilities for throat culture are not available at Keneba and Basse.

## Presenting symptoms and signs

* Sore throat
* Hoarse voice or loss of voice with pain on speaking
* Dysphagia or odynophagia maybe present
* Painful, non-productive cough
* Stridor in children
* Fever, myalgia and headaches may be present

## Examination findings

## Pharyngeal and tonsillar erythema

## Tonsillar hypertrophy

## An inflammatory exudate or membranes may cover the tonsils and tonsillar pillars.

## Palatal petechiae

## Vesicles or ulcers may also be seen on the pharyngeal walls

* Anterior cervical lymphadenopathy is common
* Patients with group A strep pharyngitis may also present with a scarlatiniform rash. The resulting syndrome is called scarlet fever or scarlatina.

People with a sore throat caused by streptococcal bacteria are more likely to benefit from antibiotics. Centor criteria is a clinical scoring tool that can help to identify the people in whom this is more likely.

### Centor criteria

* Tonsillar exudate
* Tender anterior cervical lymphadenopathy or lymphadenitis
* History of fever (over 38°C)
* Absence of cough

Each of the Centor criteria score 1 point (maximum score of 4).

A score of 0, 1 or 2 is thought to be associated with a 3 to 17% likelihood of isolating streptococcus.

A score of 3 or 4 is thought to be associated with a 32 to 56% likelihood of isolating streptococcus.

### Red flag signs for sore throat

* Persistent fever
* Failed antibiotic treatment
* Medication-induced agranulocytosis
* Mouth drooling-consider epiglottis (don’t examine the throat)
* Sharp pain on swallowing (? Foreign object)
* Marked swelling of quinsy
* Candidiasis-consider diabetics or immunosuppression.

## Investigations

No investigations are required, except for children aged 3 years or older who have a Centor score of 3 or 4. These children should have a throat swab for culture to confirm the presence of group A strep pharyngitis.

Testing for group A strep pharyngitis is not routinely indicated for children younger than 3 years of age and adults because acute rheumatic fever is very rare in those age groups.

Children who have a throat swab taken should be given a follow up appointment to get the results one week later. They should be given antibiotics in the meantime as described below.

## Management

Pharyngitis is usually self-limiting. Symptoms can last up to a week and most people will get better in a week regardless of the aetiology.

* Rest
* Analgesics: paracetamol; adults 1 g 6-8 hourly; 10-15 mg/kg for children
* Steam inhalations may help
* If likely to be strep pneumonia (Centor score 3 or 4) or symptoms lasting more than 2 weeks, antibiotics can be used:

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| **Antibiotics** |  |  |
| 1st choice | Phenoxymethypenicillin (Penicillin V) | 500 mg qds or 1 g QDS for 10 days  Children: 50-75 mg/kg/day QDS for 10 days |
| *Alternative first choices for penicillin allergy or intolerance* | Erythromycin | 250 mg to 500 mg QDS or  500 mg to 1 g BD  for 5 days |
|  | Azithromycin | 10 mg/kg OD for 3 days |

### Complications

Suppurative complications result from the spread of group A strep from the pharynx to adjacent structures. They can include:

* Peritonsillar abscess
* Retropharyngeal abscess
* Cervical lymphadenitis
* Mastoiditis
* Other focal infections or sepsis are even less common.

Group A streptococcal pharyngitis is of special concern because its complications include streptococcal toxic shock syndrome, acute rheumatic fever (ARF), acute glomerulonephritis, and scarlet fever, as well as cutaneous infections. In addition, this pathogen is readily transmissible, especially in households, families, and other intimate groups.

### Differential diagnoses

**Candida pharyngitis**: Determine the underlying cause (HIV, DM, corticosteroids including inhalers, overuse of broad spectrum antibiotics) and treat accordingly. Use Nystatin suspension to rinse and swallow QDS 6hrly for 7 to 14 days.

**Diphtheria**: Due to *Corynebacterium diphtheria* always fatal in non-immunized people.

* Give antitoxins, penicillin or erythromycin 500 mg QDS x 10/7.
* Isolate patient.

**Acute epiglottitis:** In children, it is a medical emergency. Child usually holds head still, leaning forward and drooling saliva. Admit in the ward and treat with parenteral antibiotics. DO NOT ATTEMPT TO EXAMINE THE THROAT AS THE CHILD MAY GO INTO LARYNGOSPASM.

## Key Issues for Nursing care

Good hand hygiene and respiratory etiquette can reduce the spread of all types of group A streptococcal infection and should be advocated to patients. Treating an infected person with an antibiotic for 24 hours or longer generally eliminates their ability to transmit the bacteria.

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| --- | --- | --- |
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