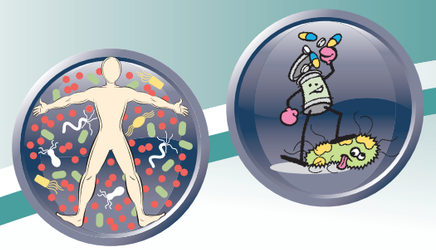

# Pharyngitis-Tonsillitis in Children and Adults

Translated from the original French version published March 2010

*This **clinical guide** is provided for information purposes and is not a substitute for the practitioner's judgment.*

## GENERAL

- **VIRUS: MOST CASES OF PHARYNGITIS**
- Bacteria: *Streptococcus pyogenes* (group A β-hemolytic streptococcus) most usual cause of pharyngitis:
  - 10% in adults
  - 15-30% in children aged 3-15 (winter-spring)

## DIAGNOSIS

**Viral pharyngitis:**

- Gradual onset
- Frequent symptoms are:
  - Conjunctivitis
  - Cough
  - Hoarseness
  - Rhinorrhea

***Group A β-hemolytic streptococcus (GAS) as probable cause of pharyngitis***

| Feature | High probability | Low probability |
|---|---|---|
| **Season** | Winter-spring | Summer |
| **Age** | 3-15 years | < 3 years or > 15 years |
| **Onset** | Sudden | Gradual |
| **Symptoms** | Severe sore throat, pain on swallowing, headache, fever, nausea, vomiting and abdominal pain occasionally | Conjunctivitis, hoarseness, cough, rhinorrhea, diarrhea, absence of fever |

The epidemiological context (positive contact) also increases the probability of streptococcal infection.

***McIsaac score for assessing sore throat***

| Criteria | Points |
|---|---|
| History of fever ≥ 38 °C | 1 |
| Presence of tonsillar exudates | 1 |
| Tender anterior cervical adenopathy | 1 |
| No cough | 1 |
| Age < 15 | 1 |
| Age ≥ 45 | -1 |
| **Total score** | **Percentage (%) of GAS infection** |
| **0-1** | 1-10% |
| **2-3** | 17-35% |
| **> 4** | 50% and over |

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*Please note that other references have been consulted.*

Conseil du médicament Québec

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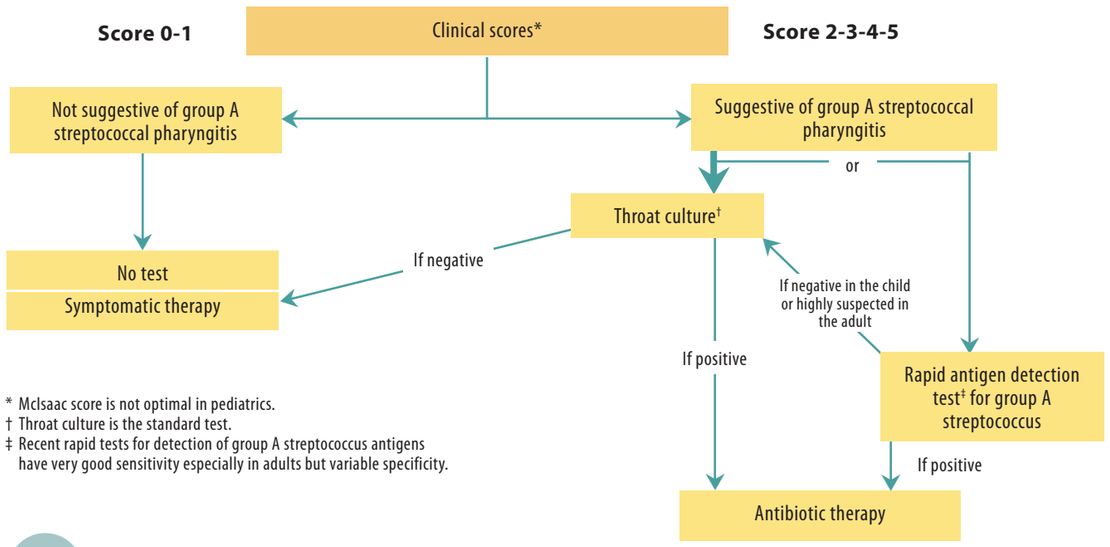
**This guide was developed with the collaboration of the professional corporations (CMQ, OPQ), the federations (FMOQ, FMSQ) and Québec associations of pharmacists and physicians.**

## DIAGNOSIS AND MANAGEMENT




* McIsaac score is not optimal in pediatrics.
† Throat culture is the standard test.
‡ Recent rapid tests for detection of group A streptococcus antigens have very good sensitivity especially in adults but variable specificity.

## TREATMENT GUIDELINES

- **Most cases recover within 3-5 days without antimicrobial therapy**
- **VIRAL PHARYNGITIS: NO ANTIBIOTICS**
  Symptomatic treatment: analgesics/antipyretics
- **BACTERIAL PHARYNGITIS:**
  - **Wait for positive result of culture or rapid test before initiating therapy** unless presence of the following:
    - Important symptoms
    - Clinical signs of scarlet fever
    - Pharyngitis complications
    - Contact with a documented case of group A streptococcal pharyngitis
    - History of acute rheumatic fever
  - **Antibiotic therapy**
    - Slight reduction in duration of symptoms by approximately 1 day for group A with antibiotic use.
    - Consider using antibiotics for group C and G streptococci in the symptomatic patient.
    - The main objective is the prevention of acute rheumatic fever and suppurative complications associated with pharyngotonsillitis (peritonsillar abscess).
    - **Penicillin** is the treatment of **choice** because of its efficacy and its safety.
    - Because of the unpleasant taste of penicillin V suspension, **amoxicillin** may be used as effectively to treat young children.
    - Reassess if not responding after 48-72 hours of therapy (Right diagnosis? Compliance? Complications?)
    - Recurrent pharyngitis, consider:
      - ✔ Cephalosporins
      - ✔ Clindamycin
      - ✔ Amoxicillin-clavulanate potassium

      } These antibiotics have shown a higher eradication rate as compared to penicillin V

### *CHILDREN*
### *Treatment of group A streptococcal pharyngitis*

| Antibiotic | Daily oral dosage* | Maximum daily dosage | Duration |
|---|---|---|---|
| **First-line therapy** | | | |
| **Penicillin V** (PenVee®) | 50 mg/kg/day ÷ BID | 600 mg BID | 10 days |
| **Amoxicillin** | 50 mg/kg/day ÷ BID | 500 mg BID | 10 days |
| **In case of allergy†** | | | |
| **Cephalexin** | 50 mg/kg/day ÷ BID | 500 mg BID | 10 days |
| **Clarithromycin** (Biaxin®) | 15 mg/kg/day ÷ BID | 250 mg BID | 10 days |
| **Azithromycin‡** (Zithromax®) | 12 mg/kg/day DIE | 500 mg on 1st day then 250 mg DIE x 4 days | 5 days |

### *ADULTS*
### *Treatment of group A streptococcal pharyngitis*

| Antibiotic | Oral dosage | Duration |
|---|---|---|
| **First-line therapy** | | |
| **Penicillin V** (PenVee®) | 600 mg BID | 10 days |
| **En cas d'allergie†** | | |
| **Cefadroxil** (Duricef®) | 1 000 mg DIE | 10 days |
| **Cephalexin** | 500 mg BID | 10 days |
| **Clarithromycin** (Biaxin Bid®) | 250 mg BID | 10 days |
| **Azithromycin‡** (Zithromax®) | 500 mg on 1st day then 250 mg DIE x 4 days | 5 days |

* Daily oral dosage must be divided as recommended.
† In cases of type-1 penicillin allergy, cephalosporins are not a treatment option. The antibiotics used in case of allergy are usually listed in alphabetical order of their generic name. Only one brand name product is listed although several manufacturers may market other brand names.
‡ A Canadian prospective cohort study (Vanderkooi et al, 2005) has shown a significantly lower risk of emergence of macrolide resistance with the use of clarithromycin (Biaxin®, Biaxin Bid® or Biaxin XL®) as compared to azithromycin (Zithromax®).