

## DEFINITION

Acute laryngitis is an acute inflammation of the voice box (larynx) due to overuse, irritation, or infection. Clients typically present with hoarseness of voice which resolves within 2 weeks without any treatment. Onset is abrupt and usually associated with symptoms of viral upper respiratory tract infection (URTI).

**Note:** Diagnosis and management of chronic laryngitis is beyond the scope of an RN with additional authorized practice. Causes of chronic laryngitis may include serious etiologies. Chronic laryngitis has symptoms lasting longer than 2 weeks. Onset of symptoms can be sudden or gradual.

## IMMEDIATE CONSULTATION REQUIRED IN THE FOLLOWING SITUATIONS

- Immunocompromised clients (e.g., bone marrow transplanted clients and clients with leukemia or lymphoma)
- Respiratory distress
- More than 2 weeks history of hoarseness of voice
- Stridor
- Shortness of breath
- Signs and symptoms of sepsis (e.g., fever, tachycardia, hypotension, tachypnea, altered mental status)
- Odynophagia
- Dysphagia
- Hemoptysis
- Any symptoms suggestive of head and neck cancer

## CAUSES

### Viral Causes

- *Respiratory syncytial virus*
- Rhinovirus
- Influenza and parainfluenza
- Adenovirus
- Coronavirus
- Coxsackievirus
- Measles
- Varicella-zoster

**LARYNGITIS ADULT**

**Bacterial Causes**

- Staphylococcus
- *Haemophilus influenzae*
- *Bordetella pertussis*
- Group A beta-hemolytic streptococcus

**Fungal Causes**

- *Candida albicans*
- Histoplasma
- Blastomyces
- Aspergillus
- Molds

**Non-Infectious Causes**

- Excessive voice use
- Allergic exposure
- Trauma
- Irritant inhalation
- Tobacco use excess
- Gastroesophageal reflux disease (GERD)
- Autoimmune and granulomatous conditions that may involve larynx
- Hypothyroidism
- Chronic sinusitis

**PREDISPOSING AND RISK FACTORS**

- Smoking
- Occupational use of voice
- Immunocompromised state
- Long-term use of anti-inflammatory and immunosuppressant drugs
- Inhaled corticosteroid use
- Aging
- Stress

**HISTORY**

Enquire history of:

**LARYNGITIS ADULT**

- Changes in voice quality - verify if the onset is gradual or sudden and the duration
- Airway distress
- Fever
- Smoking
- Irritant exposure
- Recent URTI
- Malaise
- Cough
- Excessive voice use
- Medication history
- Reason for immunosuppressed state
- Allergies, asthma, inhalant use, substance abuse
- Any other systemic illness or cancer
- Recent travel or contact with people with infectious symptoms
- Occupation

Clients may complain of:

- Dry, sore, itchy throat
- Hoarseness of voice and enquire about duration
- Dry or productive cough
- Sinusitis and facial pressure
- Headache
- Neck pain
- Otagia
- Rhinorrhea

Symptoms are usually abrupt, self-limiting, and lasting less than 2 weeks.

**PHYSICAL FINDINGS**

Obtain vital signs including temperature and respirations

- Temperature may be elevated

Otolaryngological exam includes assessment of:

- Airway patency

**LARYNGITIS ADULT**

- Vocal cord dysfunction
- Mucosal alterations such as throat may be mildly to moderately injected
- No exudate in the throat
- Cervical lymph nodes may be palpable
- Purulent secretions
- Mass lesions

A laryngeal exam is beyond the scope of an RN with additional authorized practice as it requires a specialized competency.

Physical findings may vary based on the cause of the laryngitis. Examination of the ear, nose, throat, mouth, head, neck, and a neurological exam may aid in determining different causes of laryngitis.

The RN with additional authorized practice cannot assess many of the physical findings as it requires direct visualization of larynx usually performed by a specialist. However, these are the typical findings:

**Viral**

- Mild to moderate epiglottitis
- Vocal fold edema
- Subglottal swelling

**Bacterial**

- Edema and erythema of larynx
- Endolaryngeal purulent secretions

**Fungal**

- Ulceration
- Edema and erythema of larynx
- Granulation tissue
- Endolaryngeal and perilaryngeal white plaque

**DIFFERENTIAL DIAGNOSIS**

- Irritant exposure
- Bacterial tracheitis
- Chronic causes of laryngitis:

**LARYNGITIS ADULT**

- Head and neck cancer
- GERD
- Vocal cord nodules
- Tuberculosis (TB)
- Laryngeal papilloma

**COMPLICATIONS**

- Breathing difficulty due to narrowing of upper airway
- Laryngeal nodule
- Stridor and dyspnea rarely occur

**INVESTIGATIONS AND DIAGNOSTIC TESTS**

- Not necessary in most cases.

**MAKING THE DIAGNOSIS**

- Diagnosis is made by history and physical exam.

**MANAGEMENT AND INTERVENTIONS**

**Goals of Treatment**

- Relieve symptoms
- Identify and remove contributing factors (e.g., smoking)

**Appropriate Consultation**

Consult a physician/RN(NP) immediately if:

- the client has stridor and shortness of breath.
- the client's condition requires any of the following:
  - an IV antibiotic for bacterial laryngitis;
  - systemic anti-fungal medications for fungal laryngitis; and/or
  - for severe cases (with severe symptoms) where an RN with additional authorized practice believes that nebulized epinephrine or oral steroids are warranted to relieve symptoms.
- the client is on a long-term inhaled corticosteroid use; consult for reduction of dose or short term cessation.

**LARYNGITIS ADULT**

**Non-Pharmacological Interventions**

- Voice rest is the mainstay of treatment (including avoidance of shouting, excessive voice use, and frequent throat clearing or coughing)
- Removal of contributing factors (e.g., smoke, alcohol, dust, caffeine intake) is important
- Increase humidity of room air
- Adequate hydration
- Increase rest until any fever settle
- Avoid food that causes gastric reflux and acidic foods
- Avoid overeating
- Avoid eating 3-4 hours before bed

**Pharmacological Interventions**

- Generally, no treatment is necessary as most acute laryngitis is due to a viral cause and is self-limiting.
- Anti-infective agents are generally not useful unless the cause is bacterial or fungal.

**Client and Caregiver Education**

- Explain the disease course and expected outcomes.
- Counsel client/caregiver about appropriate use of medications (dose, frequency, compliance, side effects, etc.).
- Stress importance of follow-up if not resolved in 2 weeks.

**Monitoring and Follow-Up**

- Follow-up in 14 days if not resolved and sooner if symptoms worsen.

**Referral**

Refer to a physician/RN(NP) if:

- the symptoms persist for longer than 2 weeks.
- laryngitis with absence of symptoms of URTI, voice over-use, or irritant exposure.
- symptoms or signs associated with malignancy or the client has a risk factor for malignancy.
- the client presents with hoarseness of voice with duration longer than 2 weeks.

SASKATCHEWAN REGISTERED NURSES' ASSOCIATION

RNs WITH ADDITIONAL AUTHORIZED PRACTICE  
CLINICAL DECISION TOOL  
DECEMBER 1, 2016

LARYNGITIS ADULT

- the client has a history of aspiration of a liquid.

**DOCUMENTATION**

- As per employer policy

**REFERENCES**

Health Canada. (2011). *First Nations & Inuit health: Clinical practice guidelines for nurses in primary care*. Ottawa, ON: Author. Retrieved from <http://www.hc-sc.gc.ca>

*Laryngitis*. (2013, April 05). Retrieved from <https://dynamed.ebscohost.com/>

Reveiz, L., & Cardona, A. F. (2013). Antibiotics for acute laryngitis in adults. *Cochrane Database of Systematic Reviews*. doi: 10.1002/14651858.CD004783.pub4

Smith, M. (2013, May 30). *Laryngitis*. Retrieved from <http://www.essentialevidenceplus.com>

Trottier, A. M., Massoud, E., & Brown, T. (2013). A case of hoarseness and vocal cord immobility. *Canadian Medical Association Journal*, 188(17), 1520-1524.

Wood, J. M., Athanasiadis, T., & Allen, J. (2014). Laryngitis. *BMJ: British Medical Journal*, 349(7978), g5827-5. doi:10.1136/bmj.g5827

**NOTICE OF INTENDED USE OF THIS CLINICAL DECISION TOOL**

This SRNA Clinical Decision Tool (CDT) exists solely for use in Saskatchewan by an RN with additional authorized practice as granted by the SRNA. The CDT is current as of the date of its publication and updated every three years or as needed. A member must notify the SRNA if there has been a change in best practice regarding the CDT. This CDT does not relieve the RN with additional practice qualifications from exercising sound professional RN judgment and responsibility to deliver safe, competent, ethical and culturally appropriate RN services. The RN must consult a physician/RN(NP) when clients' needs necessitate deviation from the CDT. While the SRNA has made every effort to ensure the CDT provides accurate and expert information and guidance, it is impossible to predict the circumstances in which it may be used. Accordingly, to the extent permitted by law, the SRNA shall not be held liable to any person or entity with respect to any loss or damage caused by what is contained or left out of this CDT.

SRNA © This CDT is to be reproduced only with the authorization of the SRNA.