College of Registered Nurses of Saskatchewan

Acute Laryngitis: Adult

Ears, Eyes, Nose Throat and Mouth

Clinical Decision Tools for RNs with Additional Authorized Practice [RN(AAP)s]

Effective Date: May 4, 2022

Background

Laryngitis is an acute inflammation of the larynx due to overuse, irritation, or infection. Clients typically present with voice hoarseness, which typically resolves within three weeks without any treatment. Onset is abrupt and may be associated with symptoms of viral upper respiratory tract infection (URTI) (Bruch & Kamani, 2019; Jaworek et al., 2018; McCaffrey, Dunphy, & Porter, 2019a; McCaffrey, Porter & Dunphy, 2019b; Whited & Dailey, 2018).

Immediate Consultation Requirements

The RN(AAP) should seek immediate consultation from a physician/NP when any of the following circumstances exist:

- chronic laryngitis, symptoms lasting longer than three weeks;
- immunocompromised clients (e.g., bone marrow transplanted clients and clients with leukemia or lymphoma);
- respiratory distress;
- stridor;
- shortness of breath;
- signs and symptoms of sepsis (e.g., fever, tachycardia, hypotension, tachypnea, altered mental status);
- odynophagia;
- dysphagia;
- aspiration;
- hemoptysis; or
- any symptoms suggestive of head and neck cancer (e.g., masses) (Interprofessional Advisory Group [IPAG], personal communication, August 28, 2019; McCaffrey et al., 2019a; McCaffrey et al., 2019b).

Predisposing and Risk Factors

Predisposing and risk factors for laryngitis include:

- URTI,
- environmental allergies,
- smoking/vaping,
- exposure to molds,
- exposure to chemicals,
- occupational use of voice,
- immunocompromised state,
- long-term use of anti-inflammatory and immunosuppressant drugs,
- inhaled corticosteroid use,
- gastroesophageal reflux disease,
- aging, or
- stress (McCaffrey et al., 2019a; McCaffrey et al., 2019b).

Health History and Physical Exam

Subjective Findings

The circumstances of the presenting complaint should be determined. These include:

- changes in voice quality - verify if the onset is gradual or sudden and the duration,
- air wasting (loss of air through incompletely closed glottis resulting in breathy voice),
- fever,
- smoking,
- moderate to severe alcohol consumption,
- irritant exposure,
- recent or current URTI,
- malaise,
- sore or itchy throat,
- cough,
- throat clearing,
- pain or discomfort in the anterior neck,
- dysphagia,
- excessive voice use,
- medication history,
- immunosuppression,
- allergies,
- inhalant use,
- substance abuse,
- systemic illness (e.g., asthma) or cancer,
- unexplained weight loss,

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- recent travel or contact with people with infectious symptoms, and
- occupation (Jaworek et al., 2018; McCaffrey et al., 2019a; McCaffrey et al., 2019b).

Objective Findings

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.

Typically, the exam will be non-contributory.

Red flags where referral to an otolaryngologist should be considered include:

- history of smoking (10 pack-years or more);
- enlarged cervical lymph nodes that are firm, fixed and irregular;
- progression of hoarseness;
- referred otalgia;
- dysphagia or aspiration;
- odynophagia or throat pain;
- hemoptysis;
- stridor or dyspnea;
- unexplained weight loss; and/or
- moderate to severe alcohol consumption (Morgan & Rigby, 2018; McCaffrey et al., 2019b).

Differential Diagnosis

The following should be considered as part of the differential diagnosis:

- benign vocal fold lesions,
- laryngeal cancer,
- neurologic disease (e.g., Parkinson's, Myasthenia gravis),
- bacterial tracheitis,
- chronic causes of laryngitis include irritants, laryngopharyngeal reflux, and muscle tension dysphonia (Bruch & Kamani, 2019; McCaffrey et al., 2019a; McCaffrey et al., 2019b).

Making the Diagnosis

Diagnosis is usually made by history and physical exam. There is no way to differentiate between viral and bacterial causes clinically, but viral is the most common cause (Jaworek et al., 2018; Whited & Dailey, 2018).

Investigations and Diagnostic Tests

Investigations and diagnostic tests are not recommended.

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Management and Interventions

Goals of Treatment

The primary goals of immediate treatment are to relieve symptoms, and identify and remove contributing factors (e.g., smoking) (McCaffrey et al., 2019b).

Non-Pharmacological Interventions

The RN(AAP) should recommend, as appropriate, the following non-pharmacological options:

- voice rest as the mainstay of treatment (including avoidance of shouting, excessive voice use, and frequent throat clearing or coughing),
- removal/avoidance of contributing factors (e.g., smoke, alcohol, dust, caffeine intake),
- increase humidity of room air,
- adequate hydration,
- saltwater gargles (¼ to ½ teaspoon of salt in one cup of water),
- avoiding acidic foods and those that causes gastric reflux,
- smaller more frequent meals, and
- no eating three to four hours before bed (Anti-infective Review Panel, 2019; McCaffrey et al., 2019b).

Pharmacological Interventions

The pharmacological interventions recommended for the treatment of laryngitis are in accordance with the *RxFiles: Drug Comparison* Charts (RxFiles Academic Detailing Program, 2021), *Anti-infective Guidelines for Community-acquired Infections* (Anti-infective Review Panel, 2019), *CPS Drug Information* (Canadian Pharmacists Association, 2021), and *Laryngitis (*Whited & Dailey, 2018).

Analgesics and Antipyretics

	Drug	Dose	Route	Frequency	Duration
Adult					
	Acetaminophen	500-1000 mg (maximum daily dose of 4 g/day)	p.o.	q4-6h prn	5-7 days
AND/ OR	Ibuprofen (preferred)	400 mg (maximum daily dose of 1600 mg/day)	p.o.	6-8h prn	5-7 days

Client and Caregiver Education

The RN(AAP) provides client and caregiver education as follows:

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- Explain the disease course and expected outcomes.
- Counsel about appropriate use of medications (dose, frequency, compliance, side effects, etc.) (Jaworek et al., 2018; Whited & Dailey, 2018).

Monitoring and Follow-Up

The client should be advised to follow-up in three weeks if symptoms have not resolved and sooner if symptoms worsen.

Complications

The following complications may be associated with laryngitis and include:

- breathing difficulties due to narrowing of the upper airway,
- laryngeal nodule, and/or
- stridor and dyspnea (Jaworek et al., 2018; Whited & Dailey, 2018).

Referral

Refer to a physician/NP if client presentation is consistent with those identified in the *Immediate Consultation Requirements* section, or if the client is on a long-term inhaled corticosteroid (discuss reduction of dose or short-term cessation), or if there is no response to therapy after three weeks (IPAG, personal communication August 28, 2019; Jaworek et al., 2018; McCaffrey et al., 2019b; Whited & Dailey, 2018).

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