Rhinitis

A Pocket Guide to Assessment and Therapy

Content based on:

Small P, Frenkiel S, et al: Rhinitis: A Practical and Comprehensive Approach to Assessment and Therapy

J Otolaryngol 2007; 36(suppl.1).

Rhinitis

A Pocket Guide to Assessment and Therapy

Adapted from:

Rhinitis: A Practical and Comprehensive Approach to Assessment and Therapy J Otolaryngol 2007; 36(suppl.1).

Rationale:

To provide evidence-based recommendations on the assessment and management of rhinitis to Canadian generalists and specialists.

Expert committee:

Peter Small,[1] Saul Frenkiel,[1] Allan Becker,[2] Pierre Boisvert,[3] Jacques Bouchard,[4] Stuart Carr,[5] Don Cockcroft,[6] Judah Denburg,[7] Martin Desrosiers,[8] Richard Gall,[2] Qutayba Hamid,[1] Jacques Hébert,[3] Amin Javer,[9] Paul Keith,[7] Harold Kim,[7] François Lavigne,[10] Catherine Lemière,[10] Emad Massoud,[11] Keith Payton,[12] Bob Schellenberg,[9] Gordon Sussman,[13] David Tannenbaum,[13] Wade Watson,[11] Ian Witterick,[13] Erin Wright[14]

1. McGill University, Montreal, QC.
2. University of Manitoba, Winnipeg, MB.
3. Université Laval, Québec, QC.
4. St. Joseph's Hospital, La Malbaie, QC.
5. University of Alberta, Edmonton, AB.
6. Royal University Hospital, Saskatoon, SK.
7. McMaster University, Hamilton, ON.
8. Montreal General Hospital, Montreal, QC.
9. St. Paul's Hospital, Vancouver, BC.
10. Université de Montréal, Montreal, QC.
11. Dalhousie University, Halifax, NS.
12. London Health Sciences Centre, London, ON.
13. University of Toronto, Toronto, ON.
14. University of Western Ontario, London, ON.

Canadian Society of Otolaryngology -Head and Neck Surgery

Canadian Society of Allergy and Clinical Immunology

Diagnosis and Assessment

Elements of a Complete History for Suspected Rhinitis

Personal history
- Nasal itch
- Rhinorrhea
- Sneezing
- Eye involvement
- Seasonality
- Triggers
- Irritants
- Smell disturbance (hyposmia or anosmia)

Family history
- Allergy
- Asthma

Environmental history
- Animals
- Flooring
- Upholstery
- Tobacco exposure
- Other noxious irritants
- Humidity

Quality of life
- Rhinitis-specific questionnaire

Medication history
Comorbidities
- Asthma
- Mouth breathing
- Snoring
- Sinus involvement
- Otitis media
- Polyps
- Conjunctivitis
- Atopic Dermatitis

Response to prior treatment
- Decongestants
- Antihistamines
- Topical eye drops
- Intranasal steroids
- Immunotherapy
- Prednisone
- Antileukotrienes

Hormonal abnormalities
- Pregnancy

Elements of a Complete Physical Examination for Suspected Rhinitis

Outward signs
- Mouth breathing
- Rubbing the nose
- Transverse nasal crease
- Infraorbital blood pooling/venous stasis
- Frequent sniffling
- Throat clearing

Nose
- Mucosal swelling, erosions, bleeding
- Septal crusting, perforation, spurs, or significant deviation
- Polyps
- Secretions
- Odour
- Inspiratory and expiratory nasal airflow

Ears
- Usually normal
- Pneumatic otoscope to assess for eustachian tube dysfunction
- Valsalva maneuver to assess for middle ear impedence

Sinuses
- Palpation of the sinuses for tenderness
- Maxillary tooth sensitivity

Posterior oropharynx
- Post-nasal drainage,
- Lymphoid hyperplasia ("cobblestoning")
- Tonsillar hypertrophy

Chest and skin
- Atopic disease
- Wheezing

Classification of Rhinitis

By Etiology

IgE-Mediated (Allergic)
- Intermittent
- Persistent

Autonomic
- Drug-induced (rhinitis medicamentosa)
- Hypothyroidism
- Hormonal
- Emotional
- Physical (*e.g.*, temperature-related)
- Foods (smells, taste)
- Irritative
- Exercise
- Recumbency
- NARES
- Pregnancy?

Infectious

Idiopathic

By Symptom Severity and Duration

Class	Severity/duration
I	Mild / intermittent
II	Moderate / intermittent Moderate-severe / intermittent Severe / intermittent Mild / persistent
III	Moderate / persistent
IV	Moderate-severe / persistent Severe / persistent

Pharmacologic Treatments for Allergic Rhinitis

Agents	Potential Benefits
Oral H_1 antihistamines	Reduction in sneezing, rhinorrhea, itching (eyes, nose, throat) Some impact on concomitant asthma
Intranasal corticosteroids	Reduction in mucosal swelling and secretions Reduction in nasal symptom score, nasal obstruction May reduce lower airway symptoms, decrease hospital admissions for asthma Improve course of infectious rhinosinusitis
Leukotriene receptor antagonists	Positive impact on concomitant asthma Reduction in sneezing, rhinorrhea, itchy eyes, nose & throat, congestion
Intranasal H_1 antihistamine	Reduction in nasal itching, sneezing and rhinorrhea
Intranasal ipratropium bromide	Reduction in watery rhinorrhea
Cromoglycate	Reduction in sneezing, rhinorrhea, nasal itching
Decongestants	Acute reduction in mucosal swelling
Topical nasal lubricants	Reduction in sensation of nasal congestion Relief from intranasal crusting (atrophic rhinitis)

Surgical Interventions for Allergic Rhinitis

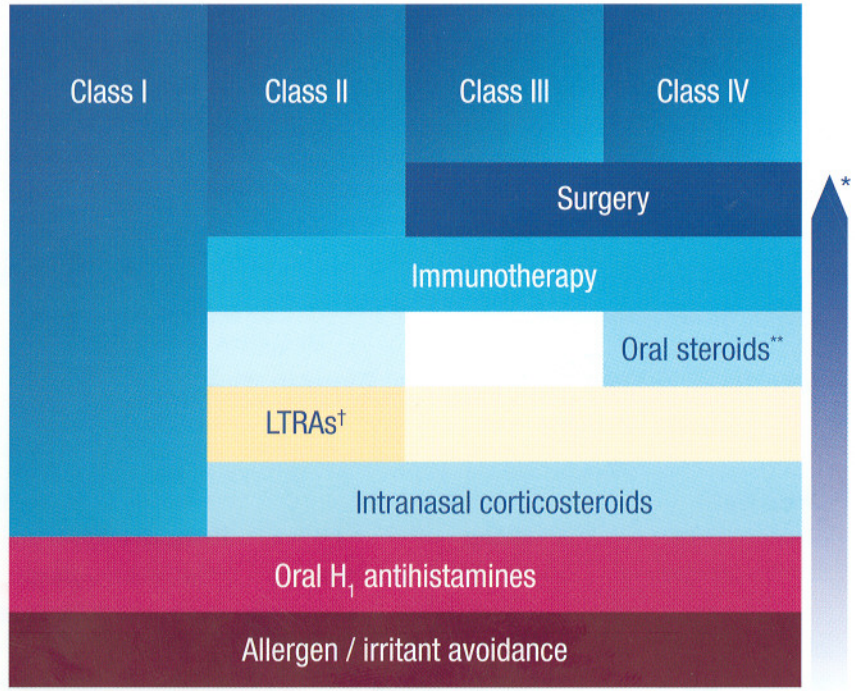
Turbinate reduction procedures

- Turbinate resection
- Cryotherapy
- Cauterization
- Laser therapy
- Radio frequency ablation

Treatment of Allergic Rhinitis by Symptom Class

Definition of Classes

Class I: mild, intermittent
Class II: moderate-to-severe, intermittent; mild, persistent
Class III: moderate, persistent
Class IV: moderate-to-severe to severe, persistent



LTRAs: leukotriene receptor antagonists

* Step up if there is no response or incomplete response to treatment, regardless of class

† LRTAs may be used in class III and IV, but there is less supporting evidence

** Oral steroids may be considered for class II (severe intermittent), but there is little supporting evidence