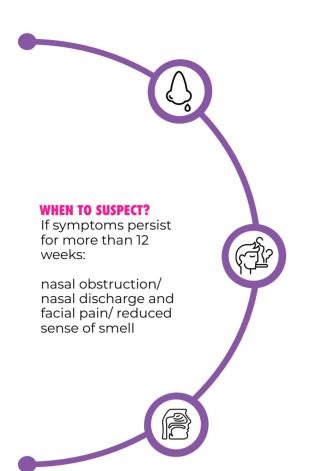




Standard Treatment Workflow (STW) for the Management of **CHRONIC RHINOSÍNUSITIS**

ICD 10 - J32.9



RULE OUT FOLLOWING PRECIPITATING/ **EXACERBATING CONDITIONS**

- Occupational exposure to irritants/ pollutants (refer to
- hyperlink) · Allergic rhinitis, aspirin sensitivity, asthma, laryngopharyngeal reflux, smoking
- Adenoid hypertrophy, bottle feeding, passive smoking in children
- Medications and hormones associated with nasal congestion (NSAIDS, antihypertensive, psychotropic drugs, prolonged use of topical nasal decongestants)

EXAMINE THE NOSE FOR NASAL POLYPI TWO PHENOTYPES

- · Chronic sinusitis with nasal polypi (CRSwNP)
- · Chronic sinusitis without nasal polypi (CRSsNP)

Frontal swelling

Signs of meningitis/ intracranial

- complications a. Fever with headache
- b. Neck stiffness c. Photophobia
- d. Altered sensorium e. Vomiting

Orbital symptoms RED

FLAG

- a. Periorbital edema/erythema
- b. Displaced globe
- c. Double or reduced vision (loss of green-red color differentiation may be the first sign)
- d. Ophthalmoplegia

Known diabetic/ AIDS/ immunosuppressive medications (suspect invasive fungal sinusitis)

TREATMENT OF CRS

Mild/moderate symptoms (no significant congestion/discharge/ polypi/complications)

- 1. Address etiology and exacerbating factors.
- 2. For allergic rhinitis, antihistamines and nasal steroid spray to be given.
- 3. Saline nasal wash
- 4. Steam inhalation
- 5. Stretching exercises and yoga are very effective for nasal congestion
- 6. Topical (oxymetazoline/ xylometazoline) and oral decongestants are associated with cardiovascular risks and rebound phenomenon. Hence, careful patient selection and short course treatment to be followed.
- 7. Intra nasal steroid sprays for 6-8weeks (Fluticasone proprionate/ Fluticasone furoate/ Mometasone) after discussing risk - benefit cost issues with patient regarding steroid sprays
- If no symptomatic relief to above treatment, perform nasal endoscopy and consider NCCT of paranasal sinuses

IN ALL PATIENTS, **ESPECIALLY IN THE** PRESENCE OF NASAL **POLYPI, RULE OUT** ALLERGY/ALLERGIC RHINITIS

- 1. Consider allergen
- avoidance 2. Skin prick test
- 3. Co-existing bronchial asthma needs to be
- 4. Consider AIT if indicated.

In presence of nasal purulent discharge

- 1. Culture directed antibiotics to be considered
- 2. If culture is negative, empirical antibiotics (Amoxycillin/ Coamoxyclay/ Fluoroquinolone/ Roxithromycin) to be given for at least 2weeks.
- 3. Upper dental (particularly 1st molar) infection may cause maxillary

sinusitis which is to be treated with metronidazole.

HYPERLINK

(https://www.dovemed.c om/diseases-conditions/ airborne-irritant-induce d-sinusitis/)

In the presence of nasal polypi, initial nasal steroid spray and subsequent endoscopic surgery is to be planned.

- 1. Short course of oral steroid (Prednisolone 0.5 mg/kg for 5 10 days) provides temporary relief in nasal obstruction in extensive polypi.
- 2. Steroid therapy is not a replacement for surgery.

Identification of precipitating or exacerbating factors is the key to successful treatment

outcome.

Always rule out DNS/ nasal polypi in CRS, as surgical treatment may be necessary for complete resolution of symptoms.

Ensure adherence to nasal saline washes / regular physical activity / medications.

Educate patients on correct technique of using steroid nasal sprays and nasal irrigation.

Prolonged use of topical nasal decongestant beyond 5-7 days may cause rebound congestion and rhinitis medicamentosa and to be strongly discouraged.

ABBREVIATIONS

AIT: Allergen immunotherapy CT: Computerized tomogram

DNS: Deviated Nasal Septum

- REFERENCES • Fokkens W, Lund V, Mullol J, et al. EPOS 2012: European Position Paper on Rhinosinusitis and Nasal Polyps 2012. Rhinol 2012;50(Suppl 23):1-298.
- Cain RB, Lal D. Update on the management of chronic rhinosinusitis. Infect Drug Resist. 2013;6:1-14.
- Ah-See KL, MacKenzie JM, As-See KW. Management of chronicrhinosinusitis. BMJ. 2012;345:e7054.
- Slovick A, Long J, Hopkins C: Updates in the management of chronic rhinosinusitis. Clin Pract. 2014;11(6):649-63. 10.2217/cpr.14.71