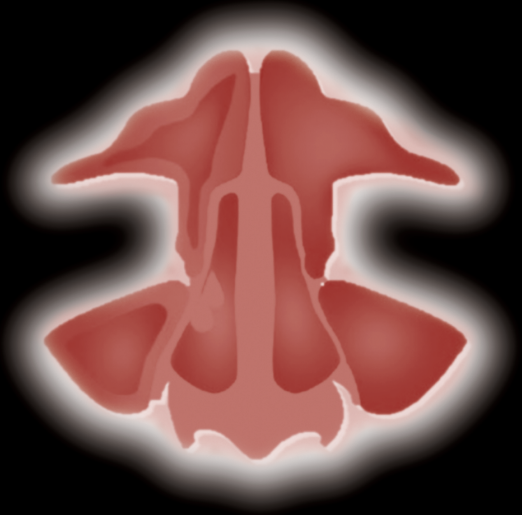
QUICK REFERENCE FOR HEALTHCARE PROVIDERS

MANAGEMENT OF RHINOSINUSITIS IN ADOLESCENTS AND ADULTS



Ministry of Health Malaysia

Malaysian Society of Otorhinolaryngologist - Head & Neck Surgeons (MS)-HNS)

Academy of Medicine Malaysia

KEY MESSAGES

1. Rhinosinusitis is a common health problem characterised by mucosal inflammation of the nose & paranasal sinuses.
2. Important risk factors for rhinosinusitis are active & passive smoking, family history, asthma & gastroesophageal reflux disease.
3. In acute rhinosinusitis (ARS), the duration of symptoms is <12 weeks.
4. Majority of ARS cases are viral in origin, with only 0.5 - 2.0% are complicated by bacterial infection.
5. Anterior rhinoscopy should be performed as part of clinical assessment of suspected ARS in primary care setting.
6. Plain radiography has no role in the routine management of rhinosinusitis.
7. Endoscopically-directed middle meatal culture should be used in diagnosing acute bacterial rhinosinusitis (ABRS) & chronic rhinosinusitis (CRS), instead of nasal swab culture.
8. Intranasal corticosteroids & nasal saline irrigation are the mainstay treatment of rhinosinusitis.
9. Antibiotic should be considered in patients with severe ARS.
10. Surgery is indicated for ARS with orbital or intracranial complications & CRS not responding to optimal medical therapy.

This Quick Reference provides key messages & a summary of the main recommendations in the Clinical Practice Guidelines (CPG) Management of Rhinosinusitis in Adolescent and Adults.

Details of the evidence supporting these recommendations can be found in the above CPG, available on the following websites:

Ministry of Health Malaysia: www.moh.gov.my
Academy of Medicine Malaysia: www.acadmed.org.my
Malaysian Society of Otorhinolaryngologists Head & Neck Surgeons: www.msohns.com

CLINICAL PRACTICE GUIDELINES SECRETARIAT
Malaysian Health Technology Assessment Section (MaHTAS)
Medical Development Division, Ministry of Health Malaysia
Level 4, Block E1, Precint 1,
Federal Government Adminstrative Centre 62590
Putrajaya, Malaysia
Tel: 603-8883 1228
E-mail: htamalaysia@moh.gov.my

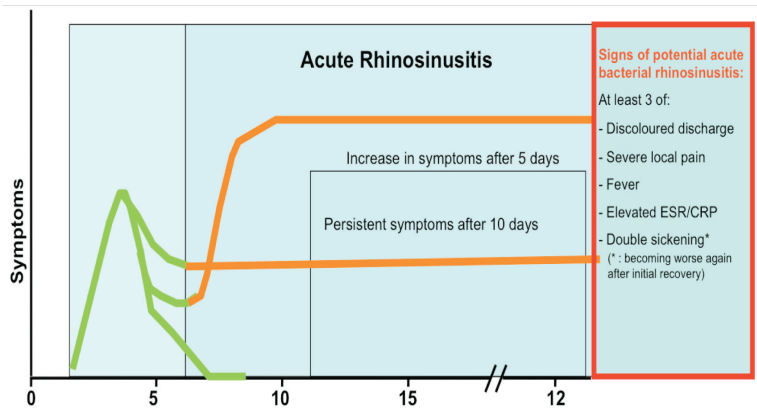
Clinical Diagnosis

- Inflammation of the nose & paranasal sinuses characterised by two or more symptoms, one of which should be either nasal blockage/obstruction/ congestion or nasal discharge (anterior/posterior nasal drip):
  - ± facial pain/pressure
  - ± reduction or loss of smell

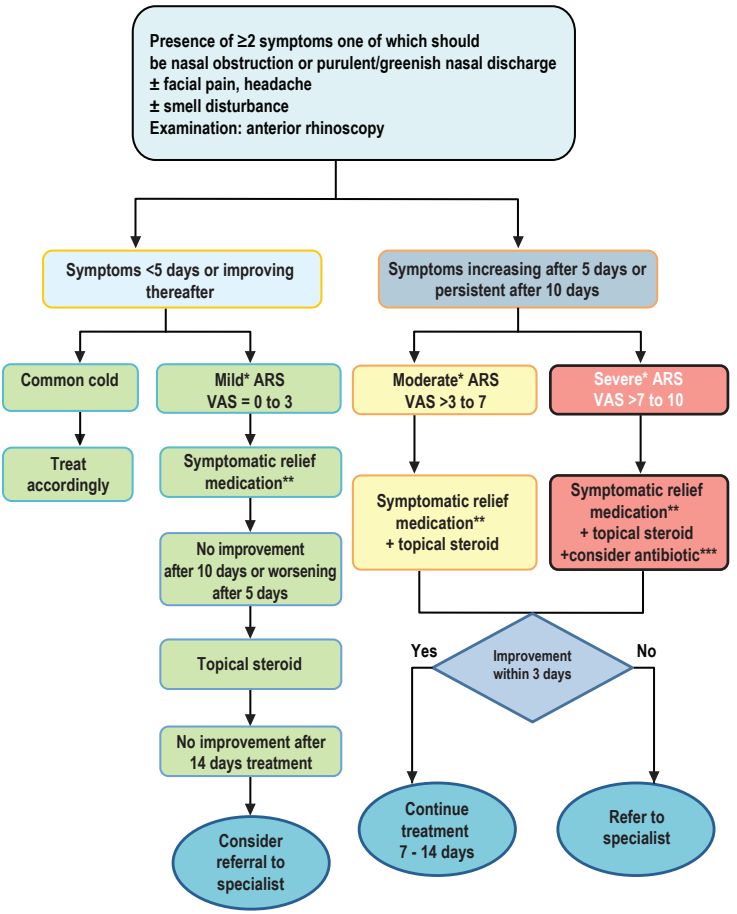
AND at least one of the following:

- Endoscopic signs of:
  - nasal polyps, &/or
  - mucopurulent discharge primarily from middle meatus &/or
  - oedema/mucosal obstruction primarily in middle meatus
- CT changes:
  - mucosal changes within the ostiomeatal complex &/or sinuses
- Past medical history of CRS (medically-diagnosed)

Increased in symptoms after 5 days or persistent symptoms after 10 days with less than 12 weeks duration

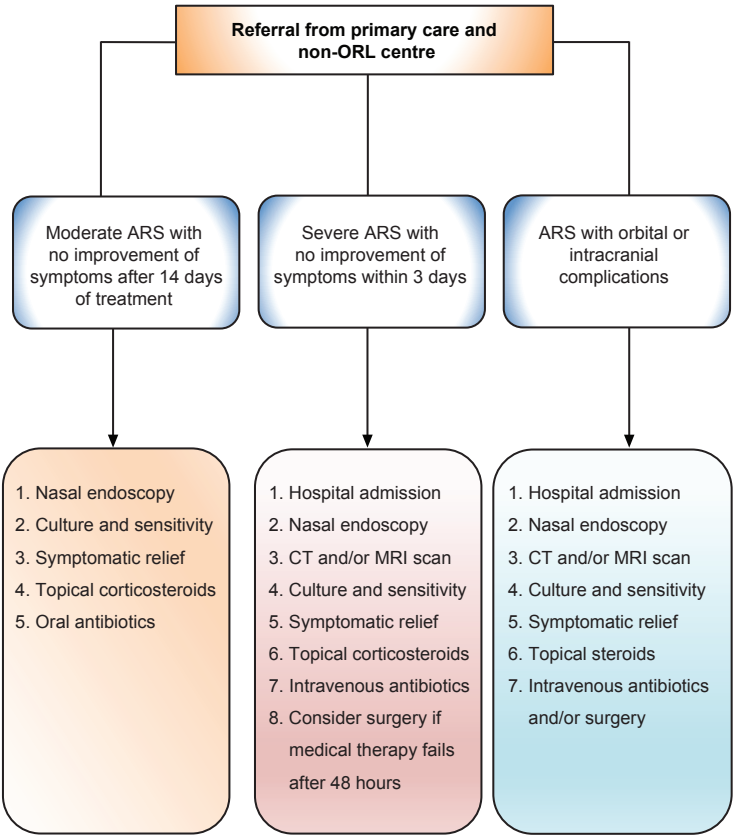


Management of ARS for Primary Care & Non-Otorhinolaryngology (ORL) Centre

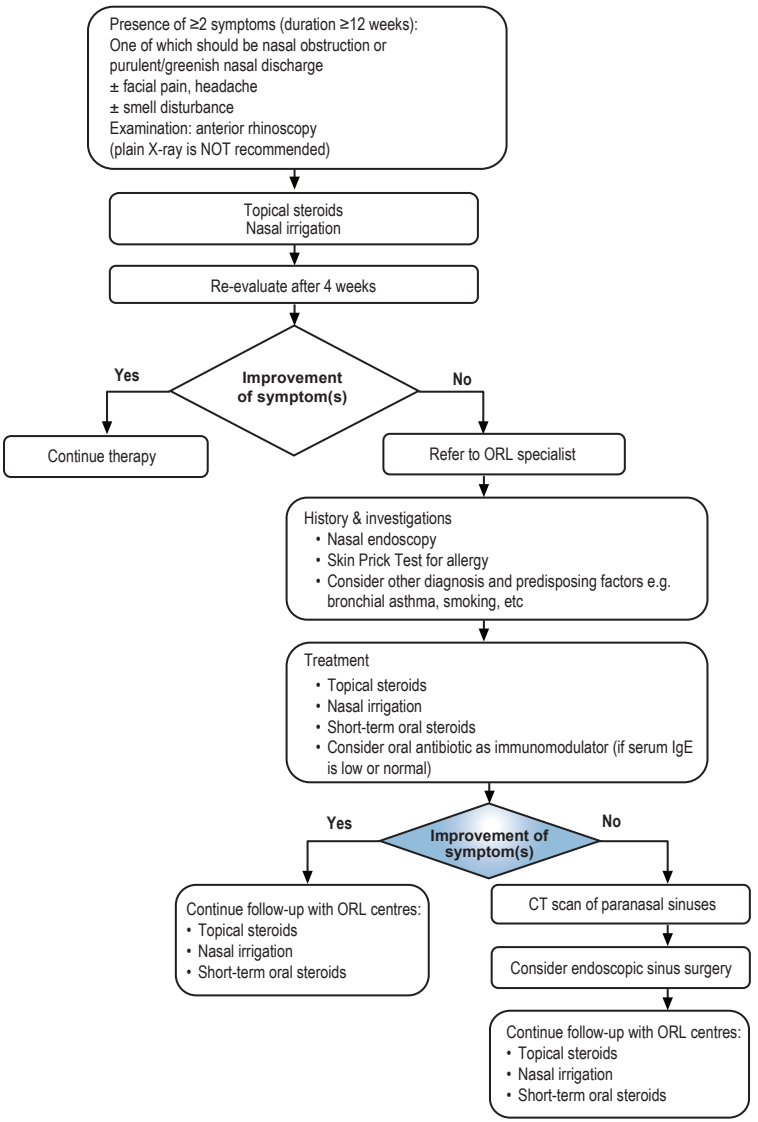


* based on visual analogue score (VAS)
** may include analgesics, nasal saline irrigation & decongestants
*** at least 3 of:
- purulent/greenish nasal discharge
- fever
- severe local pain
- "double sickening"
- elevated erythrocyte sedimentation rate/C-reactive protein

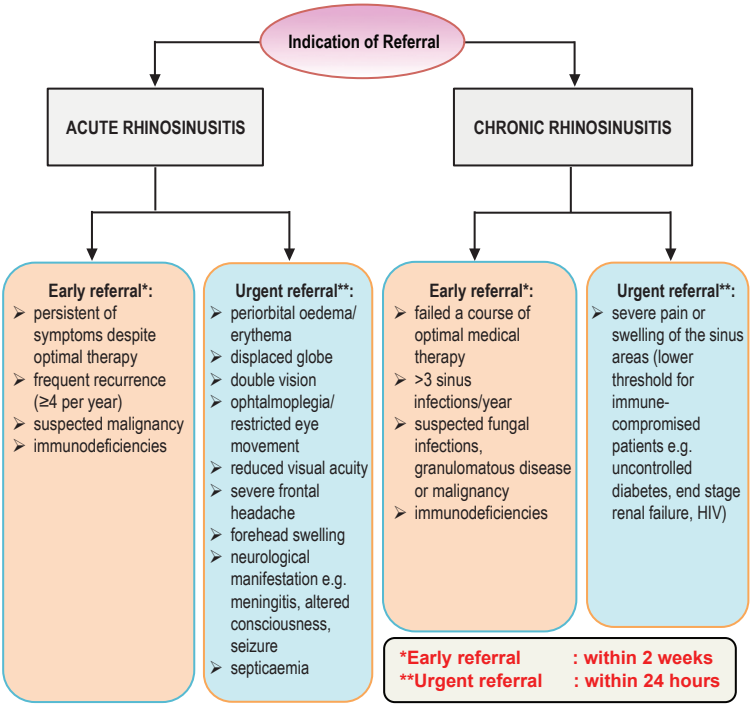
Management of ARS for ORL Centre



Management of CRS for Primary/ Secondary/Tertiary Care



Indications of Referral to ORL Centre



Summary Treatment & Recommendations For Adults With RS

Therapy	Relevance
Antibiotic	Yes in ABRS
Topical steroids	Yes, mainly in post-viral ARS
Addition of topical corticosteroids to antibiotics	Yes in ABRS
Addition of oral corticosteroids to antibiotics	Yes in ABRS
Saline irrigation	Yes
Antihistamine, analgesic & decongestion combination	Yes in viral ARS
Oral antihistamine added in allergic patients	Yes
Paracetamol	Yes, in viral and post-viral ARS
Decongestants	Yes
Mucolytics	No

MEDICATION DOSAGE, INDICATIONS & SPECIAL PRECAUTIONS IN RS

ANTIBIOTICS

Generic Drug Name	Recommended Dosage	Special Precautions
Amoxicillin	250 - 500 mg PO q8hr x 5 - 10 days *or* 500 - 875 mg PO q12hr x 5 - 10 days	• Preferred antibiotics in ABRS • Penicillin allergy, infectious mononucleosis, renal impairment
Amoxicillin & Clavulanic acid	500/125 mg PO q8hr x 5 - 7 days *or* 875/125 mg PO q12hr x 5 - 7 days	• Preferred antibiotics in ABRS • Allergy to beta-lactam antibiotics, infectious mononucleosis
Cefuroxime axetil	250 - 500 mg PO q12hr x 5 - 10 days	• Penicillin allergy, gastrointestinal disease (e.g. colitis), renal impairment
Azithromycin	500 mg PO q24hr x 3 days	• Prolonged QT interval (torsades de pointes, congenital long QT syndrome, bradyarrhythmias, uncompensated heart failure, drugs that prolong QT interval or proarrhythmic conditions), myasthenia gravis, renal & hepatic impairment
Clarithromycin	ABRS: 250 - 500 mg PO q12hr x 7 - 14 days CRS: 250 mg PO q12hr	• Coronary artery disease, prolonged QT interval (disease or co-administration of drugs that prolong QT interval or proarryhthmic conditions), myasthenia gravis, severe renal (require dose adjustment) & hepatic impairment

INTRANASAL CORTICOSTEROIDS

Generic Drug Name	Indications	Dosage
Budesonide 64 mcg/dose nasal spray	• Seasonal & perennial allergic rhinitis, & nasal polyposis • Treatment & prevention of nasal polyps	Adults & children 6 years and older: • **Rhinitis**: 2 sprays into each nostril once daily in the morning or (1 spray into each nostril twice daily) • **Nasal polyps**: 2 sprays twice daily
Fluticasone propionate 50 mcg/dose nasal spray	• Prophylaxis & treatment of seasonal & perennial allergic rhinitis • Treatment of associated sinus pain & pressure	• Adults/adolescents (≥12 years): 2 sprays in each nostril once daily • Maximum daily dose: 4 sprays in each nostril
Mometasone furoate 50 mcg aqueous nasal spray	• Symptomatic treatment associated with ARS & treatment of nasal polyps	**Allergic Rhinitis** (adults & children over 12 years): • 100 mcg/day (2 sprays) to each nostril once daily • Maximum 200 mcg (4 sprays) once daily • Reduce to 50 mcg (1 spray) once daily when control achieved **Acute Rhinosinusitis**: • 2 sprays in each nostril twice daily (total 400 mcg/day) **Nasal polyphosis** • 2 sprays in each nostril twice daily (total 400 mcg/day), • reduced to 2 sprays each nostril once daily when symptoms are adequately controlled