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सत्यमेव जयते
Department of Health Research
Ministry of Health and Family Welfare, Government of India

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Standard Treatment Workflow (STW) for the Management of

ACUTE RHINOSINUSITIS

ICD 10 J01.90

WHEN TO SUSPECT?

Usually a sequela of viral infection which causes ciliary impairment and bacterial superinfection

Diagnosis- persistence of nasal blockage/ nasal discharge and facial pain/ hyposmia beyond 7 days (maximum upto 3 months)

RELATED CLINICAL SCENARIOS

Recurrent acute sinusitis is episodes of acute sinusitis interspersed with symptom free intervals of more than 3 months in duration.

Symptoms with duration less than 7 days are treated as **viral upper respiratory infection.**

Invasive fungal sinusitis is suspected if in addition to above symptoms the following are present: facial hyposthesia, facial skin/palatal/ turbinate discoloration and proptosis/ diplopia/ reduced or loss of vision

Children may present with acute febrile illness/cough associated with these symptoms.

ALTERNATIVE CLINICAL SCENARIOS

- Consider alternate diagnosis if: Unilateral symptoms/ Bleeding/ Crusting/ Cacosmia (foul smell)
- Rule out other contributory factors: Allergy/ upper alveolar dental caries/ DNS/ LPR/ smoking.
- Rhinorrhoea and nasal congestion in second trimester of pregnancy is considered hormonal in etiology and is to be managed with saline irrigation/ drops

RED FLAGS FOR REFERRAL TO DISTRICT HOSPITAL

- Known diabetic/ immunocompromised
- Suspicion of complications viz. (A) Orbital involvement (Periorbital edema/ erythema, displaced globe, ophthalmoplegia, visual disturbance); (B) Meningitis/ altered sensorium; (C) Frontal fullness.
- Non-resolution with oral antibiotics for ten days
- Pointers of invasive fungal sinusitis (Facial hypoesthesia, facial skin/palatal/turbinate discoloration)

CLINICAL EXAMINATION

PRELIMINARY

- Anterior rhinoscopy: Discharge, bleeding, crusting, polyposis
- Oral examination: Dental caries, post nasal drip, palatal discolouration
- Assess for contributory factors listed above

DESIRABLE

- Nasal endoscopy

LABORATORY INVESTIGATIONS

Desirable in non-resolving/worsening cases despite antibiotic therapy

- Endoscopy- for guided nasal swabs/ KOH smear
- CT PNS (for suspected complications / non-resolving cases on antibiotics for 14 days)
- Screen for Diabetes / Immunodeficiency

MANAGEMENT

PHC / PRIMARY LEVEL

Duration of treatment 7-14 days

- Oral antibiotics- Amoxycillin/ Coamoxyclav for 7-10 days. Levofloxacin and Azithromycin can be opted for patients intolerant/ sensitive to penicillins.
- Topical budesonide/ mometasone nasal spray once/twice a day for 2 weeks provides earlier symptomatic relief.
- Normal saline nasal washes help in clearing secretions and improved effect of topical medications
- Topical/ oral decongestant (Oxymetazline/ pseudoephedrine) for 3-5 days relieves symptoms.
- Adequate hydration and steam inhation.
- Antihistaminics (patients with co-existing allergy).

INDICATIONS OF PARENTERAL ANTIBIOTIC THERAPY

- Orbital/ intracranial complications
- Non-resolution of symptoms with atleast 7 days of oral antibiotics
- Worsening of symptoms while on oral antibiotics

DISTRICT HOSPITAL

- Surgical interventions to manage:
- Underlying anatomical conditions causing recurrent acute sinusitis like- DNS/ adenoid hypertrophy/ anatomical variations seen on CT
- Ophthalmology referral for suspected intraorbital complications
- Dental deferral for suspected dental origin infection.
- Invasive fungal sinusitis- start antifungal medications, control underlying immunocompromising co-morbidity and consider debridement.

TERTIARY LEVEL

Cases of acute invasive fungal sinusitis/ complicated acute bacterial sinusitis and patients with immunocompromised status may be referred for management.

☛ KEEP A HIGH THRESHOLD FOR INVASIVE PROCEDURES

ABBREVIATIONS

CT: Computerized tomogram
PHC: Primary Health Center
DNS: Deviated Nasal Septum
LPR: Laryngo Pharyngeal Reflux

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