

## RHINOSINUSITIS

### CRITERIA BASED ACCESS

Rhinosinusitis is defined as inflammation of the nose and paranasal sinuses. In acute sinusitis, there is complete resolution of symptoms within 12 weeks of onset; persistence of symptoms for more than 12 weeks is categorised as chronic rhinosinusitis. Acute rhinosinusitis usually has an infective aetiology.

Diagnosis is made by the presence of two or more persistent symptoms for at least 12 weeks, one of which should be nasal obstruction and/or nasal discharge, and/or facial pain/pressure or anosmia. Chronic rhinosinusitis is sub-categorised by the presence or absence of nasal polyps (CRSwNP or CRSsNP respectively).

Treatment entails a trial of maximum medical therapy, with surgery reserved for recalcitrant cases, with a diagnosis confirmed by radiology, after an appropriate trial of conservative treatment.

Commissioning Guide and High Value Care Pathway for Rhinosinusitis as per Royal College of Surgeons guide<sup>1</sup>.

#### **Offer all patients:**

Saline irrigation: Commercially available positive pressures squeeze bottles or irrigation jugs (Netti pots) available to aid douching. High volume irrigation more effective than saline sprays.

- Intranasal corticosteroids (INCS) (8-10): advice on correct application technique. Bioavailability varies between INCS – negligible with mometasone and fluticasone
- Informed choice over treatment options is essential; patients should be provided with written information on sinusitis (e.g. NHS Choices or equivalent) and actively engaged in treatment decisions

Routine use of antibiotics for CRS in primary care is not recommended, due to limited evidence of efficacy in unselected groups, low specificity of symptomatic diagnosis without endoscopy or imaging, and risks of increasing antibiotic resistance.

**If bilateral large nasal polyps visible on anterior rhinoscopy:**

- Consider trial of oral prednisolone (0.5mg/kg for 5 – 10 days) followed by topical drops (fluticasone propionate 400mcg bd or beclomethasone tds) applied in the head upside down position
- Review after 4 weeks of treatment and refer if no improvement
- Reassess symptom control after 3 months
- For mild symptoms (VAS 0 -3) – continue with medical treatment as outlined above, emphasise need for compliance

**For persistent moderate/severe symptoms at 3 months:**

- Assess treatment compliance and technique
- Refer to specialist community or secondary care provider for nasal endoscopy and further investigation

**Secondary Care:**

- Assessment (see above) and consider diagnosis and treatment of co-morbidity – Allergy, ASA triad, systemic conditions (vasculitides, Churg-Strauss, sarcoidosis) etc.
- Endoscopy – nasal purulence, presence of polyps or oedema in middle meatus supportive of diagnosis of CRS
- Consider nasal culture – endoscopically guided middle meatal culture
- Disease-specific Patient Reported Outcome Measure to assess symptom severity and response to treatment – e.g. 22 item Sinonasal Outcome Test (SNOT-22)
- Consider CT where endoscopy findings not supportive and diagnosis is uncertain, or when malignancy or complications of CRS suggested (presence of orbital or neurological signs as above)

**For CRSwNP, and moderate/severe symptoms (VAS>3, SNOT-22>20)**

- Continue nasal saline irrigation
- Short course oral steroids (0.5mg/kg 5 - 10 days)
- Consider topical drops (fluticasone propionate 400mcg bd or beclomethasone tds) or continue intranasal corticosteroid spray
- Consider doxycycline (100mg od 3 weeks)
- Review after 3 months for moderate disease, 1 month for severe disease

**For CRSsNP, and moderate/severe symptoms (VAS>3, SNOT-22>20)**

- Continue nasal saline irrigation
- Continue intranasal corticosteroid spray
- Consider long term macrolide antibiotics; maximum 12 weeks (most likely to be effective when IgE levels NOT elevated) Do not use macrolides in patients with significant history of cardiorespiratory disease or those taking statins

Review after 3 months

## For both CRSwNP and CRSsNP

- Consider endoscopic sinus surgery (ESS) after failure of maximum medical therapy above and persistent moderate/severe symptoms
- CT mandatory before surgery if not performed earlier in care pathway (does not need to be repeated if no intervening surgical intervention)

When LM<4 (Lund-Mackay Radiological Score) alternate diagnosis should be considered, and ESS not usually indicated

Informed choice over treatment options is essential; patients should be provided with written information on sinusitis and actively engaged in treatment decisions. This should include discussion of potential complications of surgery which include post-operative bleeding and infection, scar tissue formation, rarely CSF leak and significant orbital injuries and the potential need for revision surgery.

Patient information available at:

[Sinusitis](#), NHS Choices:

[Sinus surgery](#), ENT UK

[Loss of sense of smell](#), Fifth Sense

Audit code OPCS:

E15: Operations on sphenoid sinus

E16: Other operations on frontal sinus

E17: Operations on unspecified nasal sinus

E081: Polypectomy of internal nose

E08.2: Extirpation of lesion of internal nose NEC

E12.2: Drainage of maxillary antrum using sublabial approach

E12.3: Irrigation of maxillary antrum using sublabial approach

E12.8: Other specified operations on maxillary antrum using sublabial approach

E12.9: Unspecified operations on maxillary antrum using sublabial approach

E13.1: Drainage of maxillary antrum NEC

E13.2: Excision of lesion of maxillary antrum

E13.3: Intranasal antrostomy

E13.4: Biopsy of lesion of maxillary antrum

E13.6: Puncture of maxillary antrum

E13.8: Other specified other operations on maxillary antrum

E13.9: Unspecified other operations on maxillary antrum

E14.1: External frontoethmoidectomy

E14.2: Intranasal ethmoidectomy

E14.3: External ethmoidectomy

E14.4: Transantral ethmoidectomy

E14.6: Trephine of frontal sinus

E14.8: Other specified operations on frontal sinus

E14.9: Unspecified operations on frontal sinus

Y76.1: Functional endoscopic sinus surgery

Y76.2: Functional endoscopic nasal surgery

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<sup>1</sup> <http://www.rcseng.ac.uk/healthcare-bodies/docs/published-guides/rhinosinusitis>