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Research Article

The Post–COVID Sinonasal Spectrum: Allergic Rhinitis at the Homoeopathic–Surgical Interface: A Narrative Review of Aetiology, Clinical Features, Differential Diagnosis, Diagnostic Evaluation and Individualized Therapeutics

“From SARS-Cov-2 Sequelae to Sinonasal Health: Integrating Inflammatory Phenotypes, Structural Assessment, Surgical Perspectives and Individualized Homoeopathic Therapeutics.”

Dr. Kavita Ghanshyam Malpani ^{1*}, Dr. Atul Venkatesh Kulkarni ²

¹ D.H.M.S., M.D. Homoeopathy (Homoeopathic Materia Medica), N.C. (Certificate of Naturopathy),
Yog Pravesh, Yog Parichay.

Professor and HOD, Department of Surgery, including Homoeopathic Therapeutics, Sai Homoeopathic Medical College & Nityanand Hospital, Dugad Phata, Taluka, Bhiwandi, Thane, Maharashtra, India

² B.H.M.S. Professor and HOD, Department of Surgery, including Homoeopathic Therapeutics, Vasantrao Kale Homoeopathic Medical College & Hospital, Latur, Maharashtra, India

Corresponding Author: * Dr. Kavita Ghanshyam Malpani

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Abstract

The sinonasal tract represents an important interface between environmental exposure, mucosal immunity, respiratory infection, olfaction, and upper-airway function. Coronavirus disease 2019 (COVID-19), caused by severe acute respiratory syndrome coronavirus 2 (SARS-CoV-2), introduced a distinct spectrum of post-infectious sinonasal manifestations, most prominently olfactory dysfunction, nasal symptoms, and persistent upper-airway complaints. However, the relationship between SARS-CoV-2 infection and subsequent allergic rhinitis remains incompletely established and should not be interpreted as a direct causal association in every patient. The persistence or emergence of rhinitis-like symptoms following COVID-19 therefore requires careful clinical phenotyping and exclusion of structural, inflammatory, infectious, medication-related, and other sinonasal disorders. This narrative review examines the post-COVID sinonasal spectrum with particular emphasis on allergic rhinitis and its position at the interface between homoeopathic clinical individualization and surgical/otorhinolaryngological assessment. The review discusses relevant aetiological and pathophysiological considerations, clinical manifestations, post-COVID olfactory disturbances, differential diagnosis—including deviated nasal septum, inferior turbinate hypertrophy, nasal polyps, chronic rhinosinusitis, rhinitis medicamentosa, non-allergic rhinitis and other structural or neoplastic conditions—and appropriate diagnostic evaluation. Particular attention is given to history-taking, anterior rhinoscopy, nasal endoscopy, allergy testing, olfactory assessment and the selective role of computed tomography. The therapeutic section presents a framework for individualized Homoeopathic Materia Medica consideration, emphasizing symptom totality, characteristic modalities, constitutional features and longitudinal assessment. Nevertheless, current evidence for homoeopathy in allergic rhinitis remains limited and heterogeneous, and it should not substitute for evidence-based medical therapy, diagnostic evaluation, or indicated surgical

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intervention. An integrated model is therefore proposed in which individualized complementary care is positioned alongside appropriate conventional management and timely specialist referral.

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KEYWORDS: Allergic rhinitis; COVID-19; SARS-CoV-2; post-COVID condition; sinonasal disease; olfactory dysfunction; nasal polyp; deviated nasal septum; chronic rhinosinusitis; Homoeopathy; Materia Medica; surgical assessment.

1. INTRODUCTION

Allergic rhinitis (AR) is a common inflammatory disorder of the nasal mucosa characterised by symptoms including sneezing, nasal itching, rhinorrhoea and nasal obstruction.

Contemporary consensus documents describe AR primarily as an immunoglobulin E (IgE)-mediated type I hypersensitivity response occurring following exposure to relevant allergens in sensitized individuals.



The clinical presentation of rhinitis, however, is not disease-specific. Nasal obstruction, rhinorrhoea, sneezing, postnasal drainage and alteration of smell can occur in allergic rhinitis, viral infection, post-viral states, chronic rhinosinusitis, nasal polyposis, structural obstruction and several forms of non-allergic rhinitis. Consequently, the presence of nasal symptoms after COVID-19 should not automatically be classified as

allergic rhinitis. COVID-19 has expanded clinical interest in persistent sinonasal symptoms. Olfactory dysfunction became one of the characteristic manifestations of SARS-CoV-2 infection, and Persistent quantitative and qualitative olfactory abnormalities have been documented following acute infection. This has created an important clinical question: **when a patient presents with persistent nasal symptoms after SARS-CoV-2**

infection, is the underlying problem allergic inflammation, post-viral dysfunction, structural obstruction, chronic rhinosinusitis, or a combination of these?

From a Homoeopathic Surgery Department perspective, this question is particularly relevant because the clinician must integrate **individualized symptom assessment with anatomical diagnosis and appropriate surgical judgment**. A therapeutic framework that focuses exclusively on symptoms without evaluating anatomical pathology may overlook conditions such as nasal polyps, significant deviated nasal septum (DNS), turbinate hypertrophy or sinonasal neoplasia. The present narrative review therefore approaches post-COVID sinonasal disease through three interconnected dimensions:

Inflammation → Anatomy → Individuality

2. Conceptual Framework: The Post-COVID Sinonasal Spectrum

The term “**post-COVID sinonasal spectrum**” is used in this review as a clinical umbrella rather than as a single diagnostic entity.

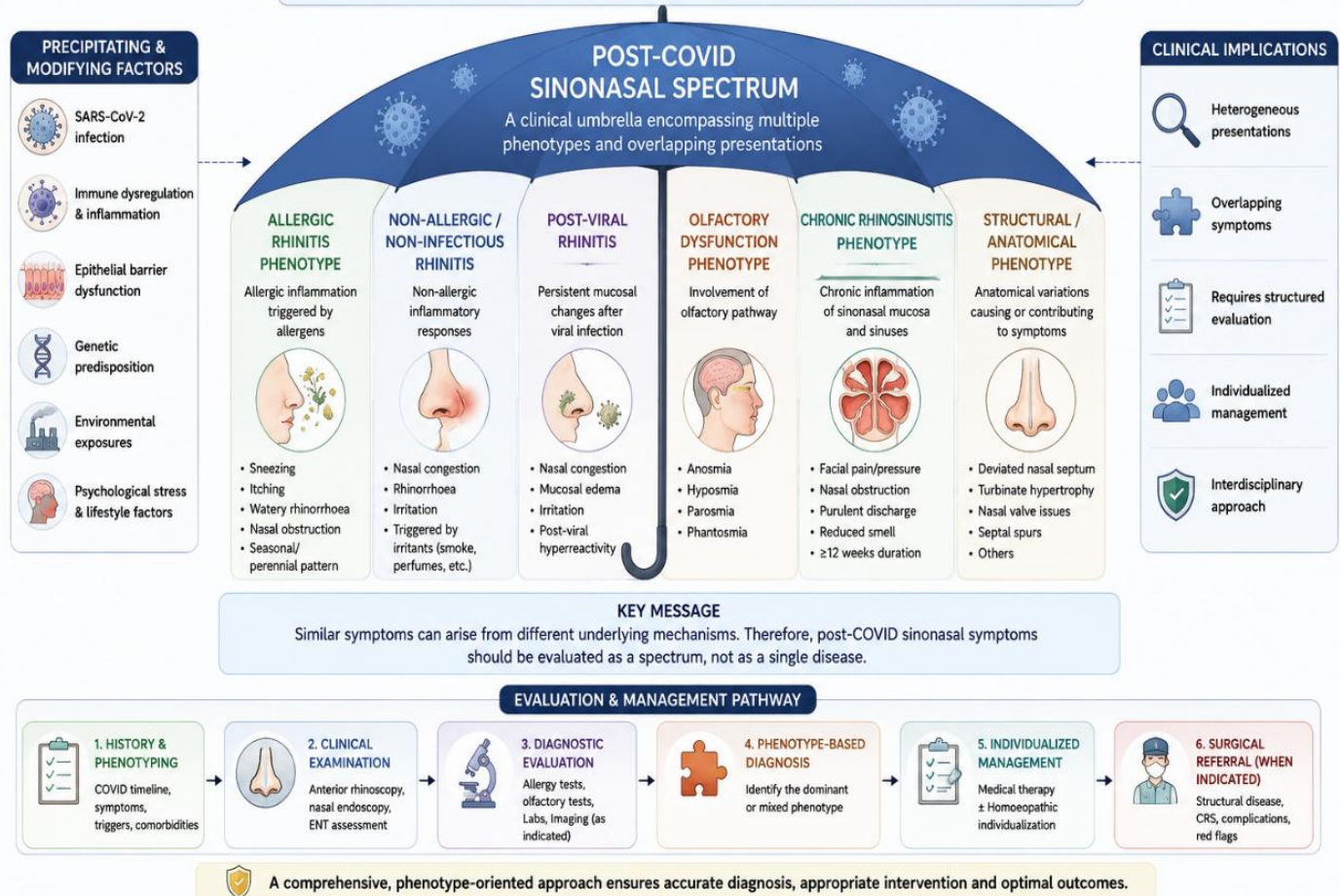
It may include:

- persistent or recurrent nasal obstruction;
- rhinorrhoea;
- sneezing and nasal itching;
- postnasal drainage;
- alteration or loss of smell;
- parosmia;
- nasal dryness or irritation;
- facial pressure;
- symptoms compatible with allergic rhinitis;
- chronic rhinosinusitis;
- structural nasal obstruction;
- or combinations of the above.

Importantly, current evidence supports persistent olfactory dysfunction as a recognized post-COVID manifestation, whereas the proposition that SARS-CoV-2 directly causes new-onset allergic rhinitis remains insufficiently established. The distinction is therefore clinically important.

Conceptual Framework: The Post-COVID Sinonasal Spectrum

The term “**post-COVID sinonasal spectrum**” is used in this review as a clinical umbrella rather than as a single diagnostic entity.



3. Aetiological Considerations

3.1 SARS-CoV-2 infection

SARS-CoV-2 primarily affects the respiratory tract but has multisystem effects. The nasal cavity and olfactory epithelium have attracted particular attention because of their relationship to viral entry, local inflammation and olfactory dysfunction. Post-COVID sinonasal symptoms may reflect several mechanisms rather than one pathological process.

3.2 post-viral inflammatory changes

Following viral infection, inflammatory processes may persist after viral clearance. Alterations in mucosal function, epithelial integrity, local immune responses and sensory pathways may contribute to continuing symptoms.

3.3 Olfactory pathway involvement

Olfactory dysfunction is among the best-characterized sinonasal consequences of COVID-19. Both quantitative dysfunction—hyposmia or anosmia—and qualitative dysfunction—particularly parosmia—have been described. Some individuals experience persistent symptoms for months or longer.

3.4 pre-existing allergic rhinitis

A patient may have had AR before COVID-19 and subsequently perceive an exacerbation of symptoms. Therefore, temporal association alone does not establish that SARS-CoV-2 caused AR.

3.5 Environmental and behavioural factors

Changes in indoor exposure, ventilation, occupational circumstances, particulate exposure, household allergens and lifestyle during and after the pandemic may modify rhinitis symptoms.

3.6 Structural predisposition

A pre-existing deviated nasal septum, turbinate enlargement, nasal valve dysfunction or polyposis may become more clinically apparent during or after an inflammatory respiratory illness.

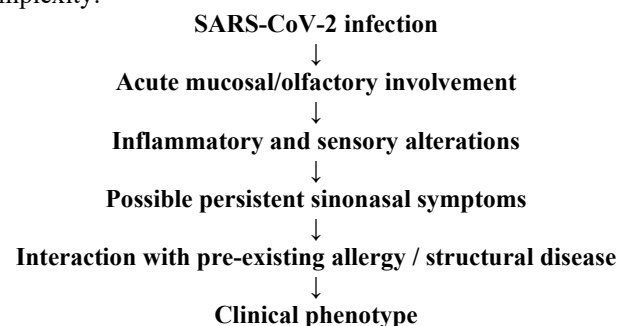
Thus:

Post-COVID symptoms may unmask pre-existing sinonasal pathology rather than represent a new disease caused exclusively by SARS-CoV-2.

4. Pathophysiological Considerations

AR involves an allergic inflammatory cascade characterized by sensitization, allergen-specific IgE and activation of inflammatory cells and mediators. Contemporary rhinology literature emphasizes the complexity of AR phenotypes and its association with other airway inflammatory disorders.

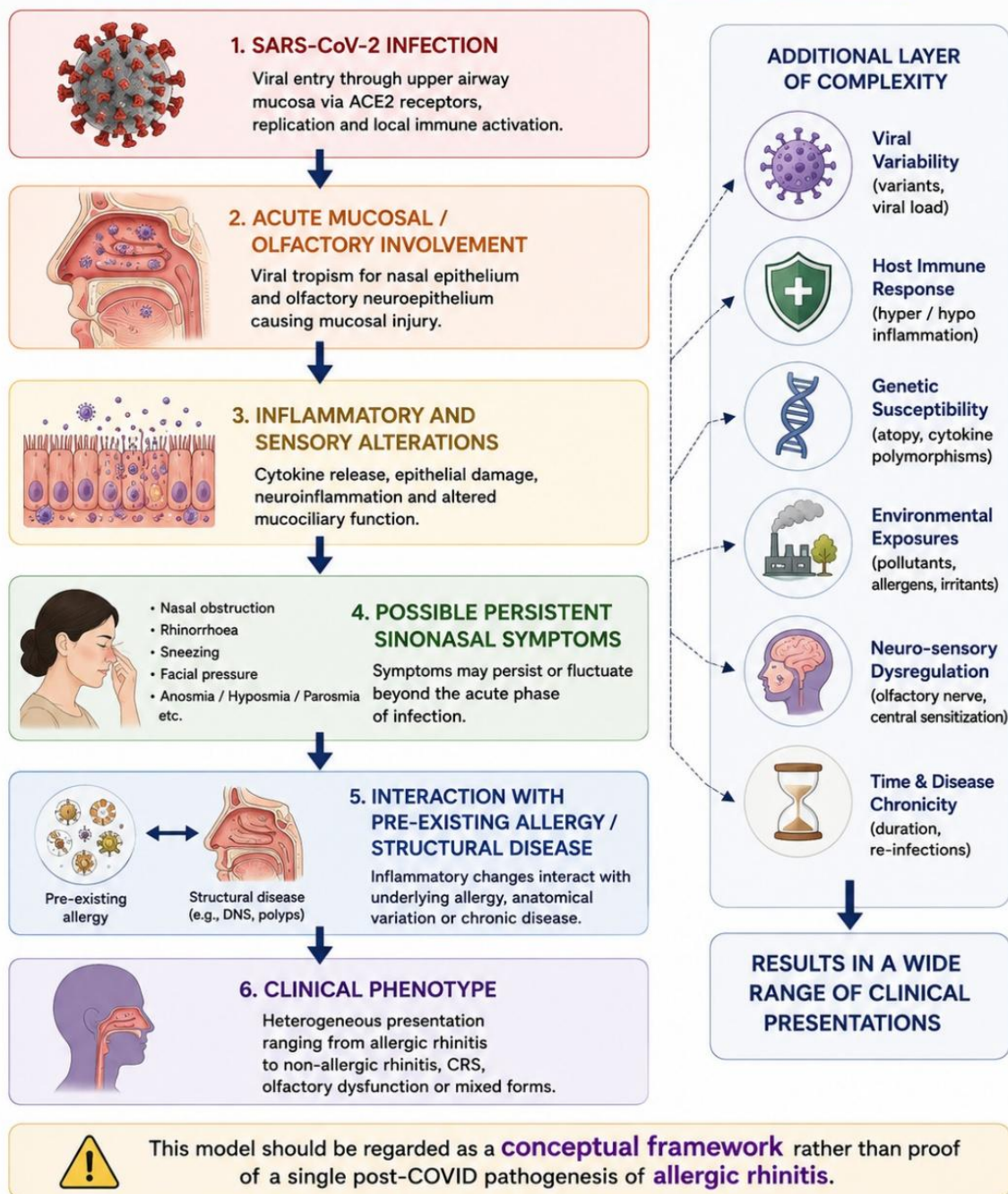
The post-COVID setting introduces an additional layer of complexity:



This model should be regarded as a **conceptual framework rather than proof of a single post-COVID pathogenesis of allergic rhinitis.**

Post-COVID Sinonasal Pathophysiological Framework

The post-COVID setting introduces an additional layer of complexity



5. Clinical Features

5.1 Classical allergic rhinitis manifestations

The classical symptom complex includes:

- recurrent sneezing;
- nasal itching;
- watery rhinorrhoea;
- nasal congestion;
- postnasal drainage;

- ocular itching or watering;
- seasonal or exposure-related variation.

The diagnosis is fundamentally clinical and depends on correlation between symptoms and relevant allergen exposure rather than sensitization testing alone.

5.2 post-COVID sinonasal manifestations

Patients following COVID-19 may additionally report:

- anosmia;
 - hyposmia;
 - parosmia;
 - dysgeusia;
 - altered nasal sensation;
 - persistent nasal obstruction;
 - dryness;
 - facial pressure;
 - abnormal nasal discharge;
 - fluctuating upper-airway symptoms.
- Olfactory dysfunction may occur independently of classical AR and therefore deserves separate evaluation.

6. Clinical History

A structured history is central to distinguishing AR from other sinonasal conditions.

Important domains include:

A. Temporal relationship

- Date of COVID-19 infection
- Acute symptoms
- Time of onset of nasal symptoms
- Duration of symptoms
- Pattern of persistence or recurrence

B. Symptom characteristics

- Sneezing
- Itching
- Rhinorrhoea
- Nasal obstruction
- Postnasal drip

- Facial pain/pressure
- Epistaxis
- Smell disturbance

C. Exposure history

- Dust
- House-dust mites
- Pollen
- Animal dander
- Occupational exposure
- Smoke
- Perfumes/chemicals

D. Previous history

- Previous AR
- Asthma
- Atopic dermatitis
- Recurrent sinusitis
- Nasal surgery
- Nasal trauma
- Previous polyps

E. Medication history

Particular attention should be given to prolonged topical decongestant use because rhinitis medicamentosa can mimic persistent nasal obstruction.

7. Differential Diagnosis: The Surgical Interface

One of the most important contributions of a Surgery/ENT-oriented review is recognizing that **not every blocked nose is allergic rhinitis**.

Condition	Important clinical clues	Surgical relevance
Allergic rhinitis	Sneezing, itching, watery rhinorrhoea	Usually medical/allergy management
Deviated nasal septum	Persistent obstruction, often unilateral/asymmetric	Septal surgery may be considered when clinically significant
Inferior turbinate hypertrophy	Persistent nasal obstruction	May require procedural/surgical assessment
Nasal polyp	Obstruction, reduced smell, visible mass	ENT evaluation essential
Chronic rhinosinusitis	≥12-week symptoms with appropriate objective findings	Medical ± surgical management
Antrochoanal polyp	Often unilateral obstruction	Surgical assessment
Rhinitis medicamentosa	Rebound obstruction after topical decongestants	Medication withdrawal/medical management
Non-allergic rhinitis	Symptoms without convincing allergen relationship	Medical evaluation
Atrophic rhinitis	Crusting, dryness, characteristic odour	Specialized management
Foreign body	Usually unilateral discharge/obstruction	Removal
Sinonasal tumour	Unilateral obstruction, bleeding, mass, facial symptoms	Urgent specialist evaluation

ICAR-Allergic Rhinitis 2023 emphasizes the broad differential diagnosis of rhinitis, including drug-induced, infectious, non-allergic, age-related, rhinosinusitis, anatomical and neoplastic causes.

8. Red-Flag Features

Certain findings should trigger **prompt ENT/surgical assessment rather than prolonged empirical treatment**.

These include:

- unilateral persistent nasal obstruction;
- recurrent unilateral epistaxis;
- visible unilateral mass;
- progressive facial swelling;
- orbital symptoms;
- visual disturbance;
- severe or unusual headache;
- neurological symptoms;
- persistent crusting or ulceration;
- significant facial pain;
- unexplained weight loss or systemic features.

EPOS 2020 specifically identifies unilateral symptoms, bleeding, crusting and several orbital, neurological and

systemic features as reasons for urgent evaluation in appropriate sinonasal presentations.



RED-FLAG FEATURES

Certain findings should trigger **prompt ENT/surgical assessment** rather than prolonged empirical treatment.



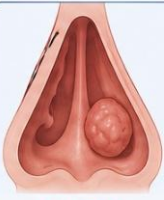
Early recognition of these features is essential to rule out serious underlying sinonasal or intracranial pathology.



1. UNILATERAL PERSISTENT NASAL OBSTRUCTION
Obstruction limited to one side, persistent and not relieved by medication.



2. RECURRENT UNILATERAL EPISTAXIS
Repeated episodes of bleeding from one nostril only.



3. VISIBLE UNILATERAL MASS
Any visible mass, polyp or growth in one nasal cavity.



4. PROGRESSIVE FACIAL SWELLING
Increasing facial swelling or asymmetry.



5. ORBITAL SYMPTOMS
Pain, swelling, redness or discomfort around the eye or orbit.



6. VISUAL DISTURBANCE
Blurred vision, double vision or decreased visual acuity.



7. SEVERE OR UNUSUAL HEADACHE
Severe, persistent, localized or atypical headache.



8. NEUROLOGICAL SYMPTOMS
Altered sensorium, weakness, numbness, facial palsy, seizures or other focal deficits.



DO NOT DELAY SPECIALIST EVALUATION
These features may indicate serious sinonasal, orbital or intracranial disease including malignancy, invasive fungal infection, complications of sinusitis, or other life-threatening conditions.





When in doubt, refer early to ENT / surgical specialist for accurate diagnosis and appropriate management.

9. Diagnostic Evaluation

9.1 General clinical examination

Assessment should include:

- general examination;
- facial inspection;
- external nasal examination;
- anterior rhinoscopy;
- oral cavity and pharyngeal examination;
- assessment for associated respiratory disease.

9.2 Nasal endoscopy

Nasal endoscopy provides direct visualization of:

- septal deviation;
- turbinates;
- polyps;
- mucosal edema;
- purulent discharge;
- crusting;
- masses;
- postoperative anatomy.

It is particularly valuable when symptoms persist despite initial treatment or when structural disease is suspected.

9.3 Allergy testing

When clinically indicated, allergy assessment may include:

- skin-prick testing;
- serum allergen-specific IgE.

However, a positive sensitization test does not automatically establish symptomatic allergic disease; clinical correlation remains essential.

9.4 Olfactory assessment

Patients with persistent post-COVID smell disturbance may benefit from structured olfactory testing.

Assessment should distinguish:

- anosmia;
- hyposmia;
- parosmia;
- phantosmia.

9.5 Computed tomography

CT of the paranasal sinuses should not be used indiscriminately for uncomplicated AR.

It becomes more relevant when:

- chronic rhinosinusitis is suspected;
- structural disease is suspected;
- nasal polyposis is present;

- symptoms are unilateral;
- complications are suspected;
- surgery is being considered.

EPOS pathways emphasize history, ENT examination, nasal endoscopy and selective CT, particularly for localized/unilateral disease and suspected surgical pathology.

10. Homoeopathic Perspective

Homoeopathic clinical practice traditionally emphasizes **individualization rather than diagnosis alone**. In this framework, the diagnostic label “allergic rhinitis” does not by itself determine the remedy.

The case may be constructed around:

- characteristic nasal symptoms;
- laterality;
- quality of discharge;
- frequency of sneezing;
- nasal obstruction;
- aggravating factors;
- ameliorating factors;
- thermal preferences;
- thirst;

- sleep;
- constitutional characteristics;
- associated symptoms;
- emotional and behavioural characteristics;
- temporal relationship to environmental exposures or illness.

This approach may be described as a **symptom-totality model**. However, an academic review should distinguish the **traditional therapeutic framework of Homoeopathy from established clinical evidence**.

11. Homoeopathic Materia Medica: Representative Therapeutic Considerations

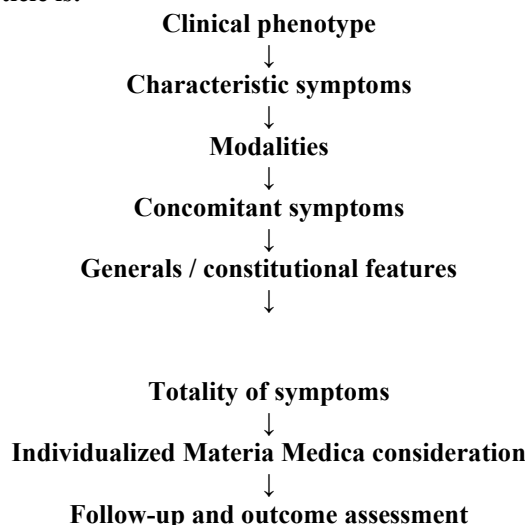
The following remedies are frequently discussed in traditional Homoeopathic Materia Medica in relation to rhinitis-type symptom pictures. Their inclusion should be understood as **Materia Medica considerations rather than evidence-based recommendations or substitutes for standard treatment**.

The selection of a remedy should therefore be based on the **individual case totality**, rather than on the diagnosis alone.

Improved Homoeopathic Materia Medica & Therapeutic Individualization Table

Homoeopathic Remedy	Characteristic Sinonasal Symptom Pattern	Characteristic Modalities / Peculiarities	Associated Features	Clinical Individualization Point
Allium cepa	Profuse, watery, acrid rhinorrhoea with frequent sneezing; nasal irritation	Traditionally worse in warm room and better in open air	Burning/irritating nasal discharge; watery eyes may accompany	Consider when profuse acrid coryza + characteristic modalities dominate
Sabadilla	Violent, repetitive or paroxysmal sneezing with nasal itching and watery discharge	Traditionally associated with exposure to allergens/cold air	Nasal and palatal itching; sensitivity to odours	Useful Materia Medica consideration when sneezing paroxysms and itching are prominent
Euphrasia	Coryza with prominent ocular symptoms	Traditionally worse in warmth/light and associated with environmental exposure	Acrid lacrimation with comparatively less irritating nasal discharge	Consider when the eye-nose symptom relationship is characteristic
Arsenicum album	Watery, burning nasal discharge with marked nasal irritation	Traditionally worse at night, cold and exposure; warmth may ameliorate	Restlessness, anxiety, weakness, chilliness	Individualize when burning discharge + restlessness + characteristic general symptoms coexist
Natrum muriaticum	Watery coryza, sneezing and alternating nasal obstruction	Traditional modalities may include periodicity and environmental triggers	Dryness/cracking, headache, altered smell/taste	Consider when chronic/recurrent rhinitis has a distinctive constitutional pattern
Nux vomica	Nasal obstruction, sneezing and irritative rhinitis; possible alternating obstruction/discharge	Traditionally aggravated by irritants, stimulants and environmental exposure	Headache, irritability, hypersensitivity	Consider particularly where irritant exposure + obstruction + characteristic generals coexist
Kali bichromicum	Thick, tenacious, stringy nasal discharge; marked postnasal catarrh	Traditionally worse with cold and in the morning	Sinus pressure, localized pain, frontal symptoms	More relevant to a thick/tenacious catarrhal or rhinosinusitic phenotype than uncomplicated watery AR
Wyethia helenoides	Marked itching and irritation of nose, palate and nasopharynx	Traditionally associated with persistent upper-airway irritation	Scratching/itching sensation of palate and throat	Consider when nasopharyngeal itching is unusually prominent
Sanguinaria canadensis	Nasal congestion/coryza with headache-associated presentations	Traditional periodicity and laterality may be important	Facial/headache symptoms	Individualize only when the nasal-headache symptom complex is characteristic
Dulcamara	Rhinitis/catarrhal symptoms associated traditionally with damp or cold exposure	Classically associated with changes from warm to cold/damp conditions	Nasal obstruction, rheumatic/catarrhal tendencies	Consider when environmental modality is strongly characteristic
Pulsatilla	Thick, bland, changeable nasal discharge with obstruction	Traditionally worse in warm rooms and better in cool/open air	Symptoms may be changeable; thirstlessness is a traditional general	Consider when bland discharge + changeability + characteristic generals predominate
Calcarea carbonica	Recurrent/chronic catarrhal tendency with nasal obstruction	Traditional aggravation from cold/damp and exertion	Constitutional features, sweating and fatigue may be prominent	Consider only when constitutional totality supports the remedy

A useful conceptual sequence for the article is:



Homoeopathic–Surgical Differentiation

This would make your article **much stronger from a Surgery Department perspective.**

Clinical Presentation	Homoeopathic Therapeutic Consideration	Structural/Surgical Consideration
Bilateral sneezing + itching + watery rhinorrhoea	Individualised AR Materia Medica assessment	Usually, no primary surgical pathology
Persistent unilateral obstruction	Do not rely solely on remedy selection	Evaluate DNS, polyp, mass, turbinate pathology
Recurrent unilateral epistaxis	Requires careful assessment before empirical treatment	ENT evaluation; exclude significant structural pathology
Nasal obstruction + visible polyp	Symptom assessment may be complementary	Nasal endoscopy / ENT assessment essential
Thick discharge + facial pressure >12 weeks	Individualized assessment may be considered	Evaluate chronic rhinosinusitis objectively
Obstruction with marked septal deviation	Constitutional/symptom assessment may coexist	Assess anatomical significance and surgical options
Post-COVID anosmia/parosmia	Individualized assessment may be considered	Olfactory assessment and appropriate ENT evaluation
Orbital symptoms / visual disturbance	Not appropriate for prolonged empirical treatment	Urgent ENT/ophthalmic assessment
Neurological symptoms or severe atypical headache	Immediate clinical assessment takes priority	Evaluate for serious sinonasal/intracranial pathology

12. Evidence Concerning Homoeopathy in Allergic Rhinitis

This section is essential for academic credibility.

A systematic review by Banerjee et al. evaluated randomized trials of homoeopathic treatment for allergic rhinitis. Eleven studies were included, but the investigators found substantial methodological limitations; eight of the eleven trials were judged to have high risk of bias. The authors concluded that the overall quality of evidence was low or uncertain and that firm conclusions regarding efficacy could not be drawn.

Therefore, an academically responsible interpretation is:

Homoeopathic individualization may be explored as a complementary clinical approach, but current evidence does not justify presenting Homoeopathy as a proven replacement for established allergic-rhinitis treatment or indicated ENT/surgical care.

This distinction is particularly important in a Surgery Department publication.

13. Conventional and Surgical Management Interface

Modern AR management is generally based on symptom severity, disease burden, comorbidities and patient preferences. Current ARIA-EAACI guidelines provide contemporary guidance regarding intranasal, oral and ocular treatment strategies.

From the surgical perspective, the objective is not to “operate on allergic rhinitis,” but to identify **structural or disease-related causes of symptoms that require specialist intervention.**

Potential surgical indications may include appropriately selected patients with:

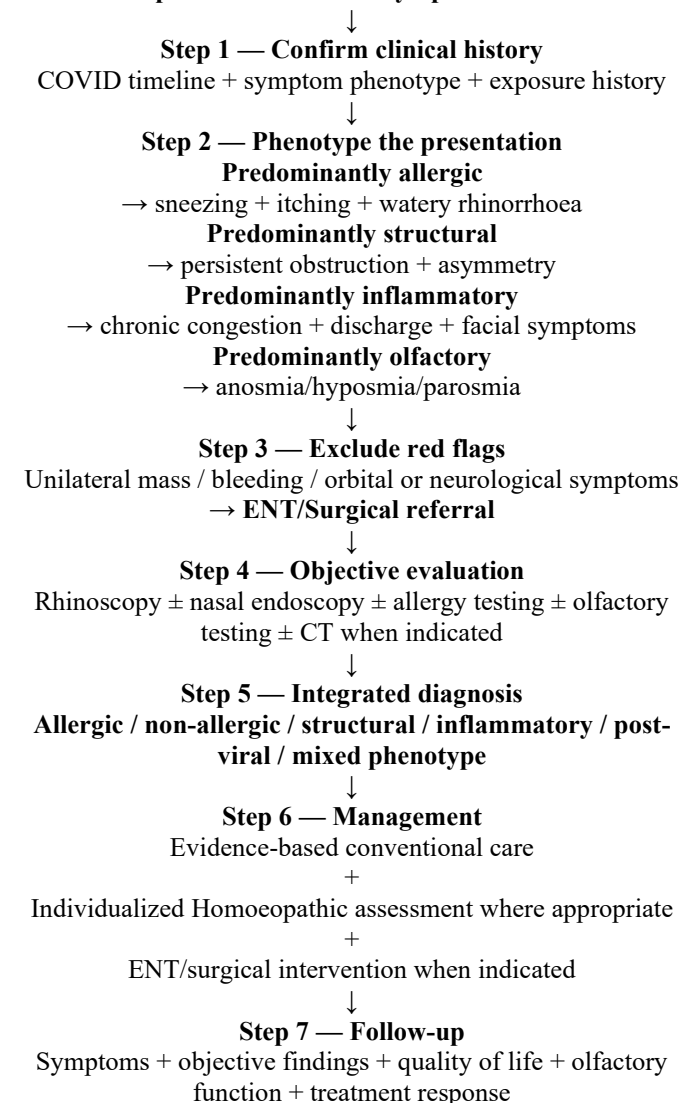
- clinically significant structural septal deviation;
- obstructive turbinate pathology;
- nasal polyposis;
- chronic rhinosinusitis refractory to appropriate medical management;
- selected sinonasal lesions;
- other anatomical abnormalities.

EPOS 2020 provides integrated pathways for rhinosinusitis and recognizes the role of endoscopy, CT and surgery in appropriately selected patients.

14. Proposed Integrated Homoeopathic–Surgical Clinical Pathway

A practical model can be represented as:

Patient with persistent sinonasal symptoms after COVID-19



15. Role of Follow-Up and Outcome Assessment

A major weakness of many complementary-medicine reports is insufficient objective outcome assessment.

Future clinical studies should consider:

- Total Nasal Symptom Score (TNSS);
- Rhino conjunctivitis Quality of Life Questionnaire;
- Visual Analogue Scale;
- nasal airflow assessment where available;
- endoscopic findings;
- olfactory testing;
- frequency of exacerbations;
- medication requirements;

- need for surgical referral;
- adverse events.

Longitudinal assessment is particularly important because post-COVID olfactory dysfunction may improve spontaneously over time, making uncontrolled therapeutic attribution difficult.

16. DISCUSSION

The post-COVID sinonasal patient presents a diagnostic challenge because several phenotypes can coexist. A patient with persistent nasal obstruction after SARS-CoV-2 infection may have allergic rhinitis, post-viral sensory dysfunction, chronic rhinosinusitis, DNS, turbinate hypertrophy or nasal polyposis—or combinations of these conditions.

The principal clinical danger is **diagnostic anchoring**: attributing every persistent nasal symptom to COVID-19 or allergic rhinitis without objective evaluation.

The second challenge is **therapeutic over-attribution**. Improvement following a complementary intervention does not necessarily establish causality, particularly in conditions with fluctuating symptoms and spontaneous recovery.

The third challenge is **failure to recognize structural pathology**. The Surgery Department perspective adds considerable value by emphasizing anatomical examination and appropriate referral.

Contemporary consensus guidance recognizes that AR has a broad differential diagnosis and that history, physical examination and appropriate testing should be integrated to establish the diagnosis.

Similarly, EPOS 2020 emphasizes objective assessment and differentiated pathways for chronic rhinosinusitis and structural sinonasal disease.

Within this context, Homoeopathy can be positioned academically as an **individualized complementary therapeutic framework requiring further high-quality research**, rather than as a replacement for diagnostic or surgical care.

17. Research Gaps

Several areas deserve further investigation.

17.1 post-COVID allergic rhinitis

Prospective studies are needed to determine whether SARS-CoV-2 infection genuinely increases the incidence or severity of new-onset AR or primarily alters the perception and persistence of pre-existing symptoms.

17.2 Phenotyping

Future studies should distinguish:

- pre-existing AR;
- new-onset AR;
- post-viral non-allergic rhinitis;
- post-COVID olfactory dysfunction;
- CRS;
- structural obstruction.

17.3 Homoeopathic clinical trials

Future trials should use:

- adequate sample sizes;

- randomized controlled designs;
- appropriate placebo/control groups;
- validated symptom scores;
- objective ENT findings;
- standardized diagnostic criteria;
- transparent reporting of remedy selection;
- long-term follow-up.

17.4 Homoeopathy and surgical pathways

A particularly innovative research area would be determining whether structured Homoeopathic assessment can improve **symptom characterization, patient-reported outcomes or quality-of-life measures** while maintaining appropriate surgical referral.

18. Limitations of the Present Review

This is a narrative review rather than a systematic review or meta-analysis. Consequently, the literature selection is not intended to provide an exhaustive quantitative estimate of treatment efficacy.

A further limitation is the rapidly evolving evidence surrounding post-COVID conditions. The biological relationship between SARS-CoV-2 infection and persistent sinonasal symptoms remains incompletely characterized.

Evidence supporting Homoeopathic treatment of AR is also limited by heterogeneity and methodological concerns.

Therefore, the proposed Homoeopathic–Surgical framework should be regarded as a conceptual and clinically integrative model requiring prospective validation.

19. CONCLUSION

The post-COVID sinonasal spectrum represents a clinically heterogeneous group of symptoms that cannot be adequately understood through a single diagnostic label. Allergic rhinitis, post-viral olfactory dysfunction, chronic rhinosinusitis and structural sinonasal abnormalities may present with overlapping manifestations.

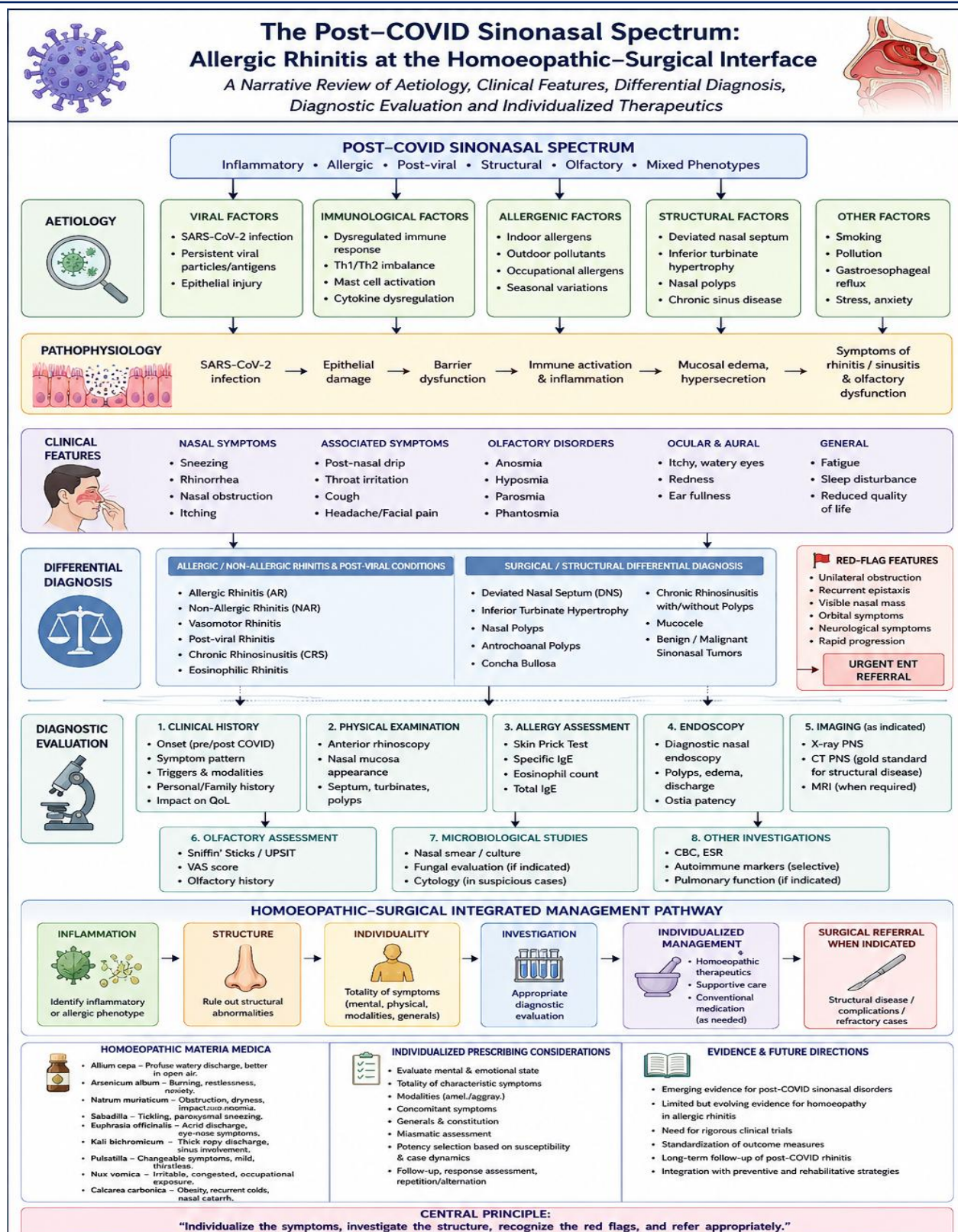
A clinically useful approach should therefore progress from:

History → Phenotyping → Examination → Differential Diagnosis → Objective Investigation → Individualized Management → Outcome Assessment.

The Homoeopathic–Surgical interface offers an interdisciplinary framework in which individualized symptom assessment can coexist with contemporary anatomical and diagnostic evaluation. The Surgery Department contribution is particularly important in identifying structural pathology such as deviated nasal septum, turbinate hypertrophy, nasal polyps and other lesions requiring specialist assessment.

Homoeopathic Materia Medica may provide a structured framework for individualized therapeutic consideration; however, available clinical evidence remains insufficient to establish homoeopathy as a replacement for evidence-based allergic-rhinitis therapy or indicated surgical treatment.

The future direction should therefore be **integration rather than substitution**: recognizing post-COVID sinonasal complexity, improving diagnostic precision, preserving appropriate surgical pathways, and investigating individualized complementary approaches through rigorous clinical research.



Author Contributions

Dr. Kavita Ghanshyam Malpani: Conceptualization of the review topic; development of the integrated Homoeopathic-Surgical framework; literature identification and review;

analysis of the aetiological, clinical, diagnostic and differential-diagnostic aspects of post-COVID sinonasal disease; synthesis of Homoeopathic Materia Medica and individualized therapeutic considerations; development of the proposed

clinical assessment pathway; drafting and critical revision of the manuscript; and overall supervision of the work.

Co- Author: - Dr. Atul Venkatesh Kulkarni: Contribution to literature review and interpretation of contemporary evidence related to COVID-19, SARS-CoV-2-associated sinonasal manifestations, allergic rhinitis, chronic rhinosinusitis and structural sinonasal disorders; critical evaluation of surgical and diagnostic considerations; contribution to the differential-diagnosis and investigation sections; critical revision of the manuscript; and approval of the final version.

Both authors contributed to the intellectual development of the manuscript, critically reviewed the final text, approved the submitted version, and agree to be accountable for the accuracy and integrity of the work.

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About the Author



Dr. Kavita Ghanshyam Malpani is a Professor and Head of the Department of Surgery, including Homoeopathic Therapeutics, at Sai Homoeopathic Medical College & Nityanand Hospital, Bhiwandi, Maharashtra. She holds D.H.M.S., M.D. in Homoeopathic Materia Medica, and certifications in Naturopathy and Yoga. Her academic and professional interests encompass surgery, homoeopathic therapeutics, naturopathy, and yoga.



Dr. Atul Venkatesh Kulkarni is a Professor in the Department of Surgery, including Homoeopathic Therapeutics, at Vasantrao Kale Homoeopathic Medical College & Hospital, Latur, Maharashtra. He holds a Bachelor of Homoeopathic Medicine and Surgery (B.H.M.S.) degree and has academic experience in teaching, clinical training, surgery, and homoeopathic therapeutics within homoeopathic medical education.