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Upper respiratory tract infection: A review with homoeopathic perspective

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Abstract
Upper respiratory tract infections (URTIs) are among most common illness in childhood and represents major cause of morbidity. These infections involve the nasal cavity, pharynx, ear, larynx, sinuses that are caused by viral or bacterial agents. URTIs are transmitted through droplet, direct contact or airborne routes and can show during season variations.
Clinically, URTIs present with nasal discharge, sneezing, nasal obstruction, cough, fever, earache, sore throat, sinusitis especially in young children. Homoeopathic treatment is safe, gentle and effective approach by individualised remedies based on symptom presentation.

Keywords: Upper respiratory tract infection (URTIs), Homoeopathy, children, viral, bacteria

Introduction
Upper Respiratory Tract Infection is a loose term which includes infection of nasal cavity, throat, nasopharynx, ear, larynx and sinuses. URTI is common causes of morbidity in children [1].
Infections of the upper respiratory system, by far the most common cause of illness in infancy and childhood accounting for approximately 50 per cent of all illness in children younger than five years of age. Young children develop on the average six to ten viral upper respiratory tract infections (URTIs). Changed lifestyle, food habits, which include a lot of preservatives, artificial colours, increasing pollution, compact living have all contributed to an increase in the rate of upper respiratory tract problems in children. Most often, viral respiratory tract infections spread when a child's hands come into contact with nasal secretions from an infected person [2]. The main symptoms of UTRI are nasal stiffness and discharge, sneezing, sore throat and cough. The presence of low-grade fever is variable and more common in children than in adults [3].
Anatomically, Upper respiratory tract includes nasal passage, pharynx, sinuses and larynx. Infection of any part of this respiratory tract is known as an upper respiratory tract infection (URTI), which is named specifically. These includes rhinitis, pharyngitis, nasopharyngitis, tonsillitis, sinusitis, and laryngitis. Viruses are the most often aetiological organism of URTI, but bacterial primary infection can occur in some patients or superinfection especially in immunocompromised host. URTIs are transmitted through droplet, airborne route or direct contact [4].
Young children suffer on average 6-8 and adults 2-4 URIs per year. The occurrence of URI displays a clear seasonal variation. The highest incidence rates are observed in the autumn and winter in temperate regions of the northern hemisphere. In tropical countries, most URIs occur during the rainy season [3].

Etiology: Rhinoviruses are the most common etiologic agents in URI. On an annual level, rhinoviruses are estimated to account for ap proximately 30-50% of all respiratory illnesses, but this percentage may rise to 80% during the autumn peak season [3].

Pathology: Owing to the great number of different viruses causing URIs, it is probable that the histopathologic changes during various viral infections will be markedly different. For example, influenza viruses are thought to have an extensive direct cytopathic effect on the respiratory epithelium, which leads to degeneration of epithelial cells and pseudo metaplastic changes in the epithelium.

On the other hand, during rhinovirus infection the number of infected cells in the upper respiratory epithelium is limited, and no histopathologic changes have been seen in nasal biopsy specimens from subjects infected with rhinoviruses. The absence of epithelial destruction during rhinovirus infections - the most frequent cause of URIs - suggests that the clinical symptoms of URI are not primarily caused by virus-induced epithelial injury but instead are caused by the inflammatory response of the host [3].

Pathogenesis: The transmission of viruses occurs most often by direct contact with virus-containing secretions, followed by self-inoculation of the viruses in the anterior nasal mucosa or in the eye. Other routes of transmission include small-particle aerosols lingering in the air and direct hit by large-particle aerosols from an infected person. The primary ways of transmission as well as the detailed pathogenetic mechanisms differ among various respiratory viruses. For example, the primary site of replication of influenza viruses is in the trachea, whereas rhinovirus replication starts predominantly in the nasopharynx [3].

Clinical Features: The diagnosis may sometimes be delayed in infants and young children, especially when fever is the leading symptom during the early stage of the illness. The incubation period of URI varies considerably among different viruses, ranging from 12h to 7days. A typical illness starts with a sore throat that is shortly accompanied by nasal stuffiness, runny nose, sneezing and cough. The soreness of the throat often disappears quickly, whereas the initial watery nasal discharge soon turns thicker and more purulent. Usually, the severity of the symptoms increases rapidly and peaks within 2-3 days. The average duration of URI is 7-10 days, but in a number of patients some symptoms may still be present after 3 weeks [5].

Types of Upper Respiratory Tract Infections: Types of UTRI are:

1. **Acute Nasopharyngitis:** It is also known as common cold. In young children 3-8 episode of common cold may occur in 1 year [1].

Etiology: The common virus includes rhinovirus and corona viruses. These are spread by droplet infection. Predisposing factor includes chilling, sudden exposure to cold air and overcrowding [1].

Clinical features: Congestion, increased secretion of nasopharyngeal mucosa. Clinical manifestation is more distressing in infants and young children these include nasal discharge, initially watery discharge than thick white to yellowish, nasal block, cough and conjunctival congestion [1].

2. **Acute Pharyngitis:** It includes infection of pharynx and tonsils. It is also called acute tonsillopharyngitis [1].

Etiology: Acute pharyngitis id caused by virus and bacteria both. Virus that causes acute pharyngitis are rhino, corona, influenza and adenovirus. The important bacteria pathogen is group A beta haemolytic streptococcus [1].

Clinical features: Children may have sore throat, fever, pain during deglutition, nasal discharge, conjunctival congestion and discomfort in throat, enlargement of tonsils and soreness in throat [1].

3. **Acute Suppurative Otitis Media:** It is common cause of morbidity in children. It is defined as inflammation of mucoperiosteal lining of the middle ear. If duration is more than 2 weeks it is termed as chronic suppurative otitis media [1]. Risk factors include exposure to cigarette smoke, overcrowding, bottle feeding, use of pacifier, cleft palate, down syndrome, allergy, immune dysfunction and gastroesophageal reflux [6].

Etiology: The most common causative organisms are streptococcus pneumoniae, haemophilus influenzae and Moraxella catarrhalis in 75% cases [6].

Clinical Features: ASOM presents with fever, ear pain, ear discharge and restlessness. In young children, this is common cause of excessive crying [1].

4. **Acute Sinusitis:** In children ethmoid and maxillary sinuses are present in infancy. Sphenoid sinuses are well developed by 3-5 years and frontal sinuses developed between 6 and 11 years of age infection of sinuses is common and associated with nasopharyngitis and pharyngitis [1].

Etiology: The common bacterial pathogens include streptococcus, pneumoniae, haemophilus influenzae and Moraxella Catarrhalis [6].

Clinical Features: Thick nasal discharge, fever, tenderness over sinuses. In young infants there may be swelling around eyes. Headache may be present [1].

5. **Acute Laryngitis:** Laryngitis refers to inflammation of the larynx, most commonly caused by an acute viral infection, resulting in hoarseness, sore throat, and voice loss. This condition is typically a mild, self-limiting condition lasting 3 to 7 days [9].

Etiology: The infectious form is more common and usually follows an upper respiratory tract infection. Viral agents such as rhinovirus, parainfluenza virus, respiratory syncytial virus, coronavirus, adenovirus, and influenza are all potential etiologic agents. The most commonly encountered bacterial organisms are *Streptococcus pneumoniae*, *Haemophilus influenzae*, and *Moraxella catarrhalis* [9].

Clinical Features: Pain in throat, dry cough, dysphagia, change in quality of voice, dryness of throat

Investigation

1. Rapid Antigen Test: to rule out covid 19 or any other complications.
2. Throat culture swab: Use to detect group A streptococcus in suspected bacterial pharyngitis
3. Blood Test: CBC may show leucocytosis in bacterial infection
4. X ray: Sinus x-ray to rule out sinusitis if suspected. Chest x-ray for chronic cough.

Differential Diagnosis: URTIs have a broad spectrum of overlapping symptoms with variable onset and duration.

The common cold is a syndrome comprising a constellation of symptoms with a relatively short onset. From a pragmatic standpoint, it is a clinical diagnosis. Common cold symptoms typically last from 7 to 10 days, although cough can linger for several weeks. The differential diagnoses is quite broad and a function of the sequence and severity of symptoms:[7]

- Covid-19
- Epstein-Barr virus
- Acute HIV
- Pertussis
- Bronchial Asthma

Treatment

Conventional Treatment: The treatment of URI is largely symptomatic and aimed at relieving the most unpleasant symptoms of the illness. Nasal stuffiness can be effectively reduced with intranasally or orally administered decongestants [4].

Homoeopathic Treatment: Homoeopathy simply means treating diseases with remedies, prescribed in minute doses, which are capable of producing symptoms similar to the disease when taken by healthy people. It is bases on the natural law of healing-"Similia Similibus Curantur" which means “likes are cured by likes”. Homoeopathy does not treat disease it treats person suffering from physically, mentally and emotionally. Homoeopathy regards each patient as a unique individual and each patient is treated individually. Commonly use Homoeopathic medicine for URTIs are:

1. **Arsenic Album:** Thin watery, excoriating discharge, sneezing without relief, worse in open air, better by indoor [8]. Deglutition painful and difficult, accumulation of greyish or greenish mucus of salt or bitter taste in throat [9].
2. **Bryonia Alba:** Soreness in larynx and trachea. Cough dry at night; nasal sit up; worse after eating or drinking, with vomiting. And expectoration of rust-coloured sputa. Buzzing sound in ears. Coryza with shooting and aching in the forehead [8].
3. **Aconite Napellus:** Coryza; much sneezing; throbbing in nostrils. Mucous membrane dry, nose stopped by up; dry or with but scanty watery coryza. Hoarse, dry, coryza cough; loud. Child grasps at throat every time he coughs. Cough, dry, short hacking; worse at night and after midnight [8].
4. **Nux Vomica:** Nose stuffed up especially at night. Coryza, fluent in daytime; stuffed uo at night and outdoors; or alternates between nostrils. Acrid discharge but with stuffed up feeling. Cough as if something were torn loose in chest. Cough brings on bursting headache and bruised pain in epigastric region [8].
5. **Hepar Sulphur:** sore. Ulcerated. Soreness of nostrils with catarrhal troubles. Sneezes every time he goes into cold, dry wind with running from nose, later, thick, offensive discharge. When swallowing sensation as if a plug and of a splinter in throat. Dry hoarse cough, cough excited whenever any part of the body gets cold or uncovered or from eating anything cold [8].
6. **Allium Cepa:** Sneezing especially when entering a warm room, copious, watery and extremely acrid discharge. Fluent coryza with headache, cough and hoarseness. Hoarseness, hacking cough on inspiring cold air. Tickling in larynx. Sensation as if larynx is split or torn. Pain extending to ear [8].
7. **Rhus Tox:** Sneezing; coryza from getting wet. Tip of nose red, sore, ulcerated. Throat sore with swollen glands. Dry, tearing cough from midnight until morning during a chill or when putting hands out of bed [8].
8. **Pulsatilla:** Coryza; stoppage of right nostril, pressing pain at root of nose. Yellow mucus; abundant in morning, dry cough in evening and at night; must sit up in bed to get relief and loose cough in the morning with copious mucus expectoration. Expectoration bland, thick, bitter, greenish [8].
9. **Spongia Tosta:** fluent coryza, nasal catarrh, cough, dry, barking, larynx sensitive to touch [8]. Coryza with much sneezing. Sore throat aggravation after eating sweet things. Hoarseness; sometimes with cough and coryza [10].
10. **Kali Mur:** Catarrh; phlegm white thick. Stuffy cold. Whooping-cough, expectoration thick and white, difficult to cough up. Tonsils inflamed, enlarged so much, can hardly breath [8].
11. **Phosphorous:** Fan like motion of nostrils. Chronic catarrh, with small haemorrhages. Hoarseness, worse evenings. Larynx is painful. Clergyman’s sore throat; violent tickling in larynx. Cough from tickling in throat; worse, cold air, reading, laughing, talking from going from warm room into cold air [8].

Conclusion

Upper respiratory tract infections are one of the most frequent causes of illness in children especially those who are below five years of age. Previous researches done on URTIs suggests that homoeopathy not only reduce the duration of illness but also reduce the severity of symptoms related to URTI and provide relief to the patient. It also reduces the reoccurring episodes of URTI in children as well as in adults. Thus, homoeopathy offers a safe, gentle and holistic approach which is particularly suitable for children with minimum risk of effects.

Conflict of Interest

Not available

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References

1. Parthasarathy A, editor-in-chief; Menon PSN, chief academic editor; Gupta P, Nair MKC, academic editors. IAP Textbook of Pediatrics. 5th ed. Gwalior: IAP National Publication House; Jaypee Brothers Medical Publishers; c2013.
2. Ramchandani NM. Homoeopathic treatment of upper respiratory tract infections in children: Evaluation of thirty case series. Complement Ther Clin Pract. 2009;16(2):101-8. doi:10.1016/j.ctcp.2009.09.008.
3. Heikkinen T, Ruuskanen O. UPPER RESPIRATORY TRACT INFECTION. Encyclopaedia of Respiratory Medicine. 2006;385-388. doi:10.1016/B0-12-370879-6/00416-6
4. 4.Desai ZP, Khunt NH, Desai PH. Homoeopathy for acute upper respiratory tract infection in adults. Int J Biol Pharm Allied Sci. 2019;8(5):897-905.

https://ijbpas.com/archive/archive-single-pdf/5852
5. VS K, S K, JK, VS, P NS, YR, *et al*. A review on upper respiratory tract infection. Asian Journal of Hospital Pharmacy. 2025;5(1):17-20. DOI:https://doi.org/10.38022/ajhp.v5i1.97.
6. Paul VK, Bagga A. Ghai Essential Pediatrics (9th ed.). New Delhi: CBS Publishers & Distributors Pvt. Ltd; c2019.
7. Tobin EH, Thomas M, Bomar PA. Upper Respiratory Tract Infections With Focus on The Common Cold. [Updated 2025 May 4]. In: Stat Pearls [Internet]. Treasure Island (FL): Stat PearlsPublishing; c2025Jan-Availablefrom: https://www.ncbi.nlm.nih.gov/books/NBK532961/
8. Boericke W. Boericke's New Manual of Homoeopathic Materia Medica with Repertory. 3rd ed. Noida (Uttar Pradesh, India): B. Jain Publishers Pvt. Ltd.; c2010
9. Gupta G, Mahajan K. Acute Laryngitis. [Updated 2022 Sep 12]. In: Stat Pearls [Internet]. Treasure Island (FL):Stat PearlsPublishing;2025Jan-. Available from: https://www.ncbi.nlm.nih.gov/books/NBK534871/
10. Clarke JH. A Dictionary of Practical Materia Medica. Vol. 3. New Delhi: B. Jain Large Print; c2005.

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