Sinusitis of children and its homoeopathic approach

Dr. Biplab Kumar Das and Ajoy Kumar Mondal

Abstract
Respiratory tract infections are the most common type of infections in childhood. Of all the respiratory infections, sinusitis is one of the most common diseases and also Sinusitis in children is a very common disease in our country, because overcrowding, under nutrition, lack of hygiene. This disease was very nicely managed by homoeopathic medicines either acute or chronic condition with proper guideline. Because, Homoeopathy system of medicine is stand on law of similia i.e. Similia Similibus Currenture.

Keywords: Sinusitis, children, homoeopathy, acute, chronic

Introduction
Inflammation of mucous membranes of any or all of the Para nasal sinuses is called Sinusitis. Para nasal air sinuses are air filled spaces present within the bones of face which make the skull lighter and add resonance to the voice. Four types of sinuses are present; they are frontal, maxillary, sphenoidal & ethmoidal, which open in to nasal cavity through its lateral wall by means of Ostia. Both ethmoidal maxillary sinuses are present at birth while frontal and sphenoidal sinuses start developing at the age of 7-8 years.

Sinusitis of children
Depending on the age of child, this may occur in the pair of sinuses located between the eyes (Ethmoid) and /or the pair behind the cheekbones (Maxillary), as both of these sinuses is present at birth. As children get older, they develop a pair of Frontal sinuses (in the forehead) and a pair of Sphenoid sinuses (behind the nose), which can also become infected.

Aetiology
A number of conditions can causes to have sinusitis. The most common isolates in acute sinus infection are S. Pneumoniae, H. Influenza, B. catarrhalis and S. Pyogenes.
- Sinusitis typically follows an upper respiratory infection (eg the common cold) or an allergic reaction (like hay fever, also called allergic rhinitis). These can cause inflammation and swelling of mucous membrane of sinuses that prevent the sinuses from draining properly. This makes the sinus a great place for organisms like bacteria, viruses, and fungus to live and grow rapidly &cause secondary infection.
- Allergies (hay fever, tobacco smoke, dry air, pollutants)
- Changes in atmospheric pressure (eg. climbing high altitudes)
Infection from dental problems
Disease or an abnormal structure in the sinus area (such as nasal polyps, deviated septum, or nasal bone spur)
Physical injury to sinuses, swimming in infected water
General cause- Poor nutrition, ill-ventilated room, endocrinal disorder.
Intra-natal and neonatal infection from mother.

Types
There are 3 types of sinusitis:

Short-term (acute): Symptoms of this type of infection last less than 12 weeks and get better with the correct treatment.

Long-term (chronic): These symptoms last longer than 12 weeks.

Recurrent: This means the infection comes back again and again. It means 3 or more episodes of acute sinusitis in a year.

Pathology of Sinusitis
Acute inflammation of sinus mucosa causes hyperaemia, exudation of fluid, outpouring of polymorphonuclear cells and increased activity of serous and mucous glands. Depending on the virulence of organisms, defences of the host and capability of the sinus ostium to drain the exudates, the disease maybe mild (non suppurative) or severe (suppurative). Initially, the exudates is serous; later it may become mucopurulent or purulent. Severe infections cause destruction of mucosal lining. Failure of ostium to drain results in empyema of the sinus and destruction of its bony walls leading to complications.

Presentation of the child with sinusitis
The following symptoms may indicate a sinus infection in the child-Cold lasting more than 10 – 14 days, sometimes with a low grade fever.
Thick yellow-green nasal discharge (unilateral or bilateral) Post nasal drip, sometimes leading to or exhibited as sore throat, cough, bad breath, nausea and / or vomiting
Headache, (pressive type of pain), usually occur in child of age 6 or more.
Sinus tenderness may be present. Irritability or fatigue, swelling around the eyes. Loss of smell.
In children with chronic sinusitis, the symptoms are usually less severe, but last longer than that of acute sinusitis.

Which children are at risk for sinusitis?
A sinus infection sometimes happens after an upper respiratory infection or common cold. The cold causes swelling that can block the opening of the sinuses. Possible conditions that can lead to sinusitis include:

- Abnormal shape of the nose
- Infection from a tooth
- Nose injury
- Foreign object in the nose
- Birth defect with abnormality of the roof of the mouth (cleft palate)
- Problem with stomach acids (gastroesophageal reflux disease, or GERD)
- Cystic fibrosis and immunodeficiency syndromes
- Immune problems or antibody deficiencies are risks for chronic sinus conditions.

Diagnosis
Diagnosis mainly based upon history & duration of symptoms. A thorough history and examination usually lead to correct diagnosis. Occasionally, special instruments will be used to look into the nose during the visit. An X- ray or a CT scan of P.N.S may help to determine how child’s sinuses are formed, where the blockage has occurred, and the reliability of sinusitis diagnosis. However it can’t be differentiated between viral, fungal, bacterial, or allergic causes of inflammation.

Complications
- Periorbital & orbital cellulitis or abscess.
- Meningitis, subdural empyema, & brain abscess.
- Osteomyelitis of frontal bone.

Prevention
The best way to prevent sinusitis is to avoid and, if unavoidable, quickly treat any flu or colds. Methods for trying to avoid getting cold or flu includes:-

- Malnutrition should be corrected.
- Washing hands frequently
- Child away from cigarette and cigar smoke.
- Drink plenty of fluids to thin the mucus.
- Eating plenty of fruits and vegetables, help in boosting the immune system.
- Physical exercise regularly by playing & yoga.
- Proper Health education in school and community.
- Limit time in chlorinated pools. The chlorine can irritate the nose and sinuses.
- Don’t have close contact with people who have colds or others upper respiratory infections.

Homoeopathic point of view
As per homoeopathy, (Sec 72) "the disease to which man is liable are rapid morbid processes of abnormally deranged vital force, which have a tendency to finish their course more less quickly but always in a moderate time" & without medication which one either terminate into death or recovery. Behind the disease there is susceptible constitution and that susceptible constitution is miasmatic dyscrasia. Miasm, is nothing but dynamic principle which pollutes the living human organism in such a way that a permanent dyscrasia or stigma is left in the system which can never disappear of itself unless completely eradicated by suitable anti miasmatic treatment, With relation to sinusitis in children, Syptic background is predominant. Syphilis miasm is predominant in particular type of cases where the sinusitis is complicated with abscess, subdural empyema, and osteomyelitis.

General management
Few Homoeopathic Therapeutics for sinusitis
No fixed medicine for sinusitis in Homoeopathy, each and every case is individual but some medicines are discus here which is as follows:

1. Arsenic album
Throbbing and burning pains in the sinuses< by light, noise, movement, after midnight, > by lying quietly in a dark room with the head raised on pillow and warmth application.
Sinusitis with nausea and vomiting. Great thirst, drinks in sips frequently, rather than in gulps.

2. **Belladonna**

Throbbing frontal headache <by jarring, touch, bending forward, or motion of the eyes and >by pressure. Pain appears strongly and rapidly but then disappear for a while, only to repeat the same again. Eyes are sensitive to light & the face flushed. Feeling of dizziness worsen on stooping.

3. **Hepar sulphuricum**

Patient is very sensitive to cold. Nasal discharge is thick and yellow. A crick makes the nostrils sore, nasal passage become sensitive to cold air. The scalp is so sensitive that simple combing of hair may be painful. Headache above the nose < from shaking the head, motion, stooping, moving the eyes, > by pressure, tight bandage.

4. **Hydrastis canadensis**

In chronic sinusitis with thick, tenacious yellow discharge from posterior nares to throat. Dull pressive frontal pain, along with constipation.

5. **Kali bichromicum**

Thick, stringy nasal discharge. Extreme pressive pain at the root of nose that is > by applying pressure there. Discharge of plugs and clinkers. Pain in small spot, can be covered with tip of finger, and may shift from one part to the other. Cough, violent with gagging from viscid mucous in throat < undressing.

6. **Lycopodium clavatum**

Snuffles of children. Stopping of nose at night, child starts from sleep rubbing nose. Frequent fan like motion of alae nasi. Feeling of dryness in posterior part of nose, with sense very acute. Headache < 4 – 8 pm

7. **Mercurius solubilis-hydargyrum**

Sensation as if head is in a wise. Headache < in open air, from sleeping, after eating and drinking. Headache < by extremes of heat and cold. Profuse salivation. The nasal passage is usually yellow-green, foetid, pus like, acrid. Nasal bones swollen <at night & from damp weather.

8. **Pulsatilla nigricans**

It useful in all sinuses. Headache <in a warm room and > in open air, pressure, cold application. Pain rapidly shifting from one part to another. Nasal discharge is thick, bland & yellowish-green. Marked thirstlessness. The mood is weepy and clingy. Child is mild and gentle.

9. **Nux vom**

Sinusitis with running of nose and sneezing is frequent by the day, but nose stopped at night. Child wakes up at around 3–4 am, < in warm room, > in cold air. Very chilly patient. Child is very impatient and anger easily.

10. **Silicea**

In chronic sinusitis, with chronic congestion along with headache that tends to be worse in the right eye; Pain is < by cold, movement, light, noise, studying, uncovering the head but > by wrapping warmly & pressure. Obstinate children, cry when spoken kindly.

11. **Sabadilla**


12. **Lycopodium**

Snuffles of children. Stopping of nose at night, child starts from sleep rubbing nose. Frequent fan like motion of alae nasi. Feeling of dryness in posterior part of nose, with sense very acute. Headache < 4 – 8 pm. Child is fear to be alone, greedy, headstrong.

13. **Tuberculinum**

Child very irritable and easily catch cold. History of tuberculosis in family. Sinusitis with frontal headache. Secretion of mucus from thick, yellow, often yellowish-green, worse in close room, dampness, early morning and after sleep better from open air.

14. **Thuja occidentalis**

Child was suffer from chronic catarrh, thick, green mucus. Dryness of nasal cavities. Painful pressure at the root. Chilly patient, fixed ideas. Child may suffer from asthma. Aggravated at night, cold, damp air, vaccination. Better from left side.

15. **Kali iodatum**

The nose comes in for much trouble. Repeated attacks of violent, acrid coryza from least cold. With the coryza the frontal sinuses become involved, and there is great pain through the forehead; pain in the eyes, pains through the cheek-bones. Thick, yellowish-green, copious discharge from the nose. Every change of weather brings on catarrhal states. Copious, watery discharge from the nose, excoriating the passage, and causing burning in the nose. The coryza is agg. in open air. Patient is hot. Patient is irritable, cruelty.

16. **Eucalyptus globulus**

Chronic catarrhal, purulent and foetid discharge. Ethmoid and frontal sinus involved.

**Repertoral Approach in Sinusitis of Children**

1. **According to Boericke’s New Manual of Homoeopathic Materia Medica and Repertory**

In Nose chapter: only taken ist grade rubrics-


Catarrh of frontal sinuses: *kali-bi., kali-i.*

Pain and swelling of antrum: *Phos., Spig.*

Syphilitic affections: kali-i.

2. **According to Repertory of Hering’s Guiding Symptoms of our Materia Medica**

In chapter Nose

Nose, sinuses: see chap. 3. Forehead sinuses.
In chapter Inner Head- only taken I and II Thick rubrics
Forehead, frontal sinuses: catarrh, I Calc., I Cup. m., I kali m., chronic, I Kali iod., catarrhal affection in coryza, II Merc., inflammation with catarrhal headache, I Kali iod., inflamed with pounding and throbbing in forehead(chronic catarrh), II Sil., pain in right, after catching cold during attack of coryza, worse in morning, near fire, II Nux- v., involved by ulceration of inner nose, I Kali iod.

3. According to Kent’s Repertory
Chapter- Head
Pain, forehead, middle, frontal sinuses from chronic coryza: *Ars., kali-bi., sang., sil., thuj.*
Chapter – Nose
Catarrh:

Fullness, frontal sinuses, from inflammation: *kali-bi.*

Conclusion
Sec.3 of Organon of Medicine Master Hahnemann says that– If the physician clearly perceives what is to be cured in diseases, that is to say, in every individual case of disease (knowledge of disease, indication).Sinusitis in childhood disease treatment is not a difficult to cure, if the selection of the similimum depends upon the proper case taking, including objective symptoms, subjective symptoms, family history, past history, desire, aversion of food, thermal reaction of the patient and individualization according to Homoeopathic principles with proper dose and proper repetition of the medicine and after follow up the treatment, finally complete cure by anti-miasmatic treatment. Side by side removal of all maintaing causes.

References