

**SINUSITIS AND HOMOEOPATHY****Dr. Zion Nathraj****Professor & H.O.D.****Department of Anatomy****Sarada Krishna Homoeopathic Medical College,****Kulasekharam****Kanyakumari district, Tamilnadu****INTRODUCTION**

Chronic sinusitis is one of the most commonly seen condition. It alters the normal functioning of the body and also affects the mental as well as physical abilities. So that they cannot concentrate their work in a proper manner. Chronic sinusitis is usually as a result of incompletely resolved acute sinusitis. In India, one in eight people are affected by chronic sinusitis. Mumbai is the most affected city. Due to increased urbanisation and over crowding most of the people are affected. For that cases infection can be corrected by proper antibiotics and surgical process FESS is adopted in necessary cases. However homoeopathic treatment provide wonderful opportunities for reducing the complications and tendencies. Thus homoeopathic reduce the intensity and keeps the individual healthy.

REVIEW OF LITERATURE:**PARA NASAL SINUSES:**

Paranasal sinuses are cavities found in the interior of the maxilla, frontal, sphenoid and ethmoid bones. They are lined with mucoperiosteum and filled with air. They communicate with the nasal cavity through relatively small apertures.

FUNCTIONS OF PNS:

It is not clear why nature provided PNS. Probable functions are:

1. Air conditioning of the inspired air by providing large surface area over which the air is humidified and warmed.
2. To provide resonance to the voice
3. It to act as thermal insulators to protect the delicate structures in the orbit and the cranium from variations of intra nasal temperature.
4. To lighten the skull bones.

The cilia helps to clear secretions by sweeping them toward a patent ostial opening and into the nasal cavity. The osteo meatal complex (OMC) is a narrow drainage pathway located in the middle meatus, which allows ventilation of the anterior ethmoid, frontal and maxillary sinus.

PATHOPHYSIOLOGY:

In chronic infections, process of destruction and attempts at healing proceed simultaneously. Sinus mucosa becomes thick and polypoidal (Hypertrophy sinusitis) or undergoes atrophy (Atrophic sinusitis). Surface epithelium may show desquamation, regeneration or metaplasia. Submucosa is infiltrated with lymphocytes and plasma cells and may show micro abscesses, granulations, fibrosis or polyp formation. Mixed aerobic and anaerobic organisms are often present.

There are two basic types of pathologic changes in chronic sinusitis:

1. Hypertrophic 2. Atrophic

HYPERTROPHIC:

Where the depth of the mucosa is greatly increased and it can become heaped up into polypoidal folds. The number of seromucinous glands and goblet cells is increased. There is infiltration of the

perivascular spaces by chronic inflammatory cells, there is fibrosis in the lamina propria, and the venous channels become tortuous and thick walled.

ATROPHIC:

Pathological changes are related to the arterioles arteritis obliterans occurs and there is loss of the pseudosratified ciliated columnar epithelium over the part of the mucosa, with a dense chronic inflammatory cell infiltrate in the deeper layers.

Chronic sinusitis in children is usually associated with nasal polyps are deviated nasal septum affecting drainage and causing retention of purulent secretion and consequent fibrotic and cystic changes in the mucosa. The normal thickness of the mucosa of the maxillary sinuses is between 0.5 to 1mm

CHRONIC SINUSITIS

Chronic inflammation of the paranasal sinuses. Maxillary sinusitis is the most common type of sinusitis. The ethmoid, frontal and sphenoid sinuses are affected less frequently. Infection reaches the sinuses from the nose, mouth, tonsils, nasopharynx and the upper canines or molars. The lining mucosa of the nose and sinuses is inflamed. Obstruction of the opening of the sinus leads to accumulation of secretion, which may get infected. Sinuses may become filled with pus.

PREDISPOSING CAUSES:

It can be divided into: Nasal causes, Dental causes

NASAL CAUSES:

Any pathological process resulting in a decreased airway over a long period of time will predispose to chronic sinusitis. In children: commonest cause is adenoid enlargement. In adults: unilateral pan sinusitis may be associated with a deviated nasal septum.

DENTAL CAUSES:

An epical dental granulation or abscess, Chronic periodontal disease, Presence of an oro antral fistula, The roots of all the upper teeth, with exception of incisors, can lie in intimate relationship to the floor of the maxillary sinus.

OTHER CAUSES:

Chronic irritation from environmental gases may also produce chronic sinusitis. Other contributory factors: Deflected nasal septum, Nasal polyps, Benign tumours of the nose, Patients with chronic suppurative lung disease constantly expectorate infected sputum that often leads to sinus infection. Lastly, gastro esophageal reflux (GERD) has been implicated as a cause of sinusitis. Gastric acid can reflux directly into the nasopharynx can cause the inflammation of the sinus ostium.

CLINICAL FEATURES:

Malaise, fever, frontal headache and nasal discharge are the presenting symptoms. In maxillary sinusitis - pain may be felt in the maxillary area of the face, Frontal sinusitis - pain around the eyebrows, Ethmoid sinusitis - pain behind the eyes and frontal headache, Sphenoid sinusitis - pain in the occipital region, Tenderness over the sinuses, Pus may be seen pouring from the opening of the affected sinus on speculum examination, Recurrent headache which shows diurnal periodicity. Headache strats in the morning and worsens by mid-day and subsides by evening, Foul smelling purulent nasal discharge may occur, Epistaxis, Symptoms like dryness of the throat and repeated sore throat may occur.

CLINICAL DIAGNOSIS:

1. History of chronic headache
2. Purulent discharge from the middle meatus is highly predictive of bacterial sinusitis.
3. Tenderness over the sinus.

Three important roles:

1. Swelling of the cheek is very rare in maxillary sinusitis.
2. Swelling of the cheek is most commonly seen in dental origin.

3. Swelling of the cheek as a result of antral disease usually indicates carcinoma of the maxillary antrum.

INVESTIGATIONS:

1. X-ray shows haziness of or opacities in the region of infected sinuses.
2. The discharge from the culture isolates the causative organism. Fungal scrapings and smears as well as fungal cultures are done if a fungal etiology is suspected.
3. CT scan for confirmation. It gives an excellent information about the extent of the disease and even though it may fail to give the specific diagnosis but it still helps in narrowing the differential diagnosis.
4. MRI : Magnetic Resonance Imaging has advantages over CT in demonstration of soft tissues. However chief disadvantage of MRI is inability to show the bony walls of the sinuses since both air and bone give no signal. For the same reason it is unable to show calcification or hyper osteosis caused by or associated with a neoplasm.
5. Chronic maxillary sinusitis is best diagnosed by sinuscopy. Malignant tumors are most common in maxillary sinus.

COMPLICATIONS:

Intracranial infections:

Infection of the eye socket:

Infection of ethmoid sinus: 3rd nerve palsy

Frontal sinusitis: osteomyelitis of the frontal bone and oedema over the region (Pott's puffy tumour)

Respiratory tract: Aspiration of pus into the respiratory tract leading to recurrent Bronchitis, Aspiration pneumonia, Bronchiectasis, Lung abscess

Secondary effects of sinusitis: Hypertrophy of lateral pharyngeal bands, Persistent laryngitis, Recurrent attacks of bronchitis or bronchiectasis, Sinusitis may produce arthritis fibrositis, dermatological disorders may also be associated.

KARTAGENER'S SYNDROME : The association of sinusitis , bronchiectasis and dextrocardia is known as kartagener's syndrome. Sinusitis and bronchiectasis may be associated with keratosis in the external ear.

TREATMENT: Treatment may be of medical and surgical

Homoeopathic treatment

Miasmatic Concept

PSORA: There are sharp, severe, paroxysmal headaches which come on in the morning, increase as the sun rises and ameliorates when the sun goes down. These are usually frontal, temporal or parietal. The headaches with red face, throbbing ameliorates by rest, quiet and sleep and also amelioration by hot applications are psoric.

Psoric disorders are functional and therefore the most superficial of all miasms.

Allergies: "AD INFINITUM" .Psoric patients have an allergic constitution and sensitivity to the environment. Therefore psoric patients are allergic to anything and everything: " Nylons, pollens, weather changes, dry leaves, wind, rain, light, sound, food, touch of woollens, odours, pollutants, pesticides, food additives.

MATERIALS AND METHODS

Sources of data:

30 cases of chronic cases of chronic sinusitis patients selected from OPD and peripheral centres of SARADA KRISHNA HOMOEOPATHIC MEDICAL COLLEGE HOSPITAL.

Method of collection of data

Sample size – 30 cases

Sampling technique – random sampling

Inclusion criteria:

1. Chronic sinusitis cases between the ages of 15-45 years.
2. Both sexes.
3. Patients with chronic headache.

Exclusion criteria:

- Patients under other medications.
- Other systemic illness
- Pregnant and lactating women
- Children below 15 years

DISTRIBUTION OF CASES ACCORDING TO PRECIPITATING FACTORS

FACTORS	NO OF MALE CASES	NO OF FEMALE CASES	TOTAL NO OF CASES	PERCENTAGE
SUN EXPOSURE	4	15	19	63.33%
COLD EXPOSURE	2	14	16	53.33%
COLD FOOD AND DRINKS	1	4	5	16.66%
DUST EXPOSURE	1	3	4	13.33%
COLD BATHING	0	5	5	16.66%
PERSPIRATION	0	6	6	20%
RAINY SEASON	0	4	4	13.33%
ICE COLD WATER	0	1	1	3.33%
OPEN AIR	0	1	1	3.33%
MENTAL EXERTION	1	8	9	30%
TRAVELLING	0	6	6	20%
SMELL OF COOKING FOOD	1	0	1	3.33%

Findings

From the above table highest incident seen in ailments from exposure 19 patients (63.33%). Next incidence we can observe from the study is cold exposure 16 patients (53.33%). Mental exertion exaggerate the condition in 9 patients (30%). Travelling aggravates the complaints in 6 patients (20%). Perspiration causes the condition in 6 patients (20%). Dust exposure predispose the condition in 4 cases (13.33%).

DISTRIBUTION OF OTHER SYMPTOMS RELATED WITH CHRONIC SINUSITIS

SYMPTOMS	NUMBER OF PATIENTS	PERCENTAGE
Sinus Tenderness	10	33.33%
Eye Pain	6	20%
Itching And Redness of Eyes	3	10%
Vomiting	5	16.66%
Fever	4	13.33%
Anosmia	1	3.33

Findings

From the above table we can observe that out of 30 patients sinus tenderness recorded from 10 patients (33.33%), eye pain seen in 6 patients (20%), vomiting 5 patients (16.66%), fever in 4 patients (13.33%), itching and redness of eyes in 3 patients (10%), anosmia reported by 1 patient (3.33%). Thus anosmia shows not much frequency in chronic sinusitis cases.

DISTRIBUTION OF CASE ACCORDING TO MEDICINAL INDICATIONS

MEDICINES	NO OF CASES	PERCENTAGE
NATRUM MURIATICUM	10	32
PULSATILLA	6	19
PHOSPHORUS	3	10
NUX VOMICA	2	7
CALCAREA CARBONICA	1	3
MERCURIUS SOLUBILIS	1	3
AURUM METALLICUM	1	3
LYCOPodium	1	3
LACHESIS MUTUS	2	7
SULPHUR	1	7
SEPIA OFFICINALIS	1	3
ARSENICUM ALBUM	1	3

Findings

12 different drugs were used in this study for treating the chronic sinusitis cases. In 30 patients strict individualization Natrum mur, pulsatilla were most frequently used drugs. By which the effectiveness of homoeopathic medicine in chronic sinusitis can be analyzed.

DISEASE INTENSITY SCORE FOR CHRONIC SINUSITIS

SYMPTOMS	BEFORE TREATMENT SCORE	AFTER TREATMENT SCORE
HEADACHE	89	0
HEAVINESS OF HEAD	49	0
POST NASAL DRIPPING	60	0
SNEEZING AND CORYZA	65	15
NOSE BLOCK	56	10

Findings

From the other table, there is considerable improvement seen in most of the cases. After treatment score of sneezing coryza and nose block shows gradual improvement.

INFERENCE

This study provides that there is significant reduction in disease intensity score after the homoeopathic treatment for chronic sinusitis in 15-45 years age group. Therefore homoeopathic medicines are more effective in the treatment of chronic sinusitis. Remedies were selected on the basis of totality of symptoms.