



## **TO EXPLORE THE STUDY OF CENTESIMAL SCALE IN MANAGEMENT OF CHRONIC SUPPURATIVE OTITIS MEDIA IN ADULT AND OLD AGE GROUP**

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### **ABSTRACT:**

The disease of its definition is an abnormal vital process, a changed state of life, which is unfavorable to the actual development of an individual and has a tendency to organic dissolution. The diseases of the ear, nose and neck are one class of disease that causes considerable morbidity and involvement between the population.

People of different civilizations were curious about how we heard and also feared deafness, so many theories were built about the hearing process. They were early Indian doctors who provided a great insight into hearing, deafness and ear diseases, etc.

In ancient Ayurveda, the study and treatment of the ear and his diseases herself about a super special level. Charaka, he is the father of Indian surgery, performs only 18 ear surgery. Papyrus Ebers contained Egyptian knowledge of the ears and papyrus Edwin Smith knowledge of deafness by injuries.

Among these ears' diseases, the middle ear is the most important and finer structure that participates in the vital processes of the body. And Otitis media are one of the often encounters with the problems that doctors have to face in everyday practice. Chronic suppurative otitis media (CSOM) is a long-term infection of a part or entire cleft of the middle ear characterized by ears and permanent perforation. CSOM is a very common condition in our country, it can remain a benign condition or can occasionally lead to fatal intracranial complications.

Chronic suppurative otitis media, (CSOM) is defined as chronic inflammation of the middle ear and mastoid cavity that represents the recurring ear release of more than three months by perforated tympanic membrane.

Although the WHO definition requires only two weeks otorrhea, 1 otolaryngologists tend to adapt the duration of more than 3 months of active disease.

**KEYWORDS:** Chronic suppurative otitis media, CSOM, centesimal scale, Homoeopathic Pharmacy, Homeopathy and Homeopathic Medicine.

### **INTRODUCTION:**

CSOM is a major health problem in developing countries causing serious local damage and threatening complications. CSOM is an important cause of preventable hearing loss in developing countries.

Incidence of this disease is higher among people with low socio-economic status because of poor hygiene, overcrowding, inadequate health care, malnutrition and recurrent upper respiratory tract infection.

It is a massive health problem and India is one of the countries with highest CSOM prevalence (> 4%) where urgent attention is needed.

1 It causes conductive and sensorineural hearing loss and has got adverse effect on childhood development.

2 CSOM is a common cause of hearing impairment and can occasionally lead to fatal intracranial complications. Hence early and accurate diagnosis of CSOM is life saving.

Both Gram positive and Gram negative bacteria are responsible for infection of the middle ear in addition to fungal etiological agents. Due to advent of newer antibiotics, the microbial organisms and their resistance pattern is changing constantly.

Due to long period of morbidity of CSOM and the repeated occurrences of otorrhea during that period, patients are prescribed empiric antibiotics in outpatient clinics without microbiological evaluation. CSOM has received a considerable attention not only because of its high incidence and chronicity but also because of issues such as ototoxicity and bacterial resistance with both systemic and topical antibiotics.

Conventional symptomatic drugs also carry their own side effects risk, including anticholinergic toxicity or liver injury from accidental overdoses. Inadequate use of these medicines for a long period of time, leads to suppression of disease into deeper regions of organism and it results in more serious complications.

Many clinical studies states that homoeopathy accelerates early symptom relief in illnesses at much lower risk then conventional drug approaches. It apparently lessens the chance of disease affecting vital systems of patient which often results from suppression caused by long continued inadequate treatment. Homeopathy can be used effectively for preventing complications and recurrences of the disease.

CSOM frequently results in communication problems, disturbed social and personal life gradually leading to withdrawal from social activities, anxiety due to recurrency of symptoms and discomfort caused by symptoms.

Homoeopathy can be used effectively for keeping ear dry, preventing complications and recurrences of the disease. This system of medicine treats ailments of long time and almost permanently. Homoeopathy is a system of medicine which treats the sick individual, not the single disease. The present study was undertaken to explore the scope of centesimal scale in management of CSOM cases in adult and old age group.

Centesimal scale is introduced by Dr. Samuel Hahnemann in 5th edition of Organon of medicine (1833) in § 270. Centesimal scale potency is based on the principle that the first potency must contain the one hundred parts of the original drug substance and each succeeding potency one hundredth part of the preceding one.

One part by volume or weight of drug or previous potency + ninety nine parts by volume or weight of vehicle.

Therefore present study was planned to explore the scope of centesimal scale in management of CSOM cases in adult and old age group.

## REVIEW OF LITERATURE:

Otitis media

### DEFINITION:

Otitis media is an inflammation of the part or the whole mucoperiosteal lining of the middle ear. Otitis media is essentially clinically -based diseases, while during the exception of the disease there is exs, disturbance and proliferation or necrosis of tissue.

The two main forms of otitis media are acute suppurative otitis media (ASOM) and chronic suppurative otitis media (CSOM).

Acute supportive otitis media (asom):

It is a pyogenic bacterial infection of the middle ear. It occurs in all age categories and especially in children. It consists of an outflow of middle ear and features of acute infection, such as fever, ear pain and bulging ear drum.

Infection routes:

Through the Eustachian tube- it is the most common route. The infection travels through the lumen of the tube or along the sub -peritubal of the lymphatic peritubal.

The Eustachian tube in infants and young children is shorter, wider and most horizontal, causing higher incidence in children.

Swimming and diving also force water through the tube into the middle ear.

Despite the outer ears-traumatic perforation of the tympanic membrane due to any cause, open the way to infection of the middle ear.

Blood is not an unusual route.

Predisposition factors:

- Recurrent attack by upper respiratory tract infections.
- Nalopharyngeal or nasal packages
- Infections of almonds and adenoids
- Highly deviated nasal septum
- nasal polyps
- rhinitis and sinusitis
- Nose and nose -nose tumors
- Short, straight, wide eustachian tube.
- Reduced immunity
- Barotrauma
- Exanthematous fever

Causative microorganisms:

Viral nasal infection proceeds with bacterial infection. Common bacteria cause otitis are hemophilus influenza, pneumococcus, betahamolytic streptococci, Moraxella Catarrhalis and Staphylococcus aureus etc.

The participating viruses are respiratory syncytial virus, human rhinoceros, human coronavirus, influenza virus, adenovirus. About 30% is the viral, but associated bacterial infection is common.

Pathology, Phase and Clinical Presentation:

Most patients have a history of upper respiratory tract infection. The course of the disease is divided into five phases,-

Stage of tympanical overload or tubal occlusion - it is the reaction of the middle ear towards the invasive organism causes swelling and hyperemia of the nosopharyngeal end of the eustachian tube. Tympanic membrane looks overloaded.<sup>15</sup> Patient complaints for pain and fullness ear, no fever, mild deafness.

The stages of the exudation- inflammatory process are proceeding and inflammatory exudates are collected in the tympanical cavity. The patient complains about pulsating ear pain with deafness, high degree of fever, bubbling sound in the ear. The tympanic membrane shows more congested and convex.<sup>15</sup> The tuning fork test shows the conductive deafness.

Stage of supplements-collected inflammatory exudates cause pressure necrosis and perforation of tympanic membranes. Perforation is central. The middle ear mucous membrane is perceived by perforation as densified and congested. The pain decreases, but hearing loss persists. The discharge is at the beginning and later mucopurulent. Tenderness over mastoid antrum. X-ray of mastoids shows the cloudy of air cells.

Stage of convalescence - the disease begins to retreat. Recovery depends on the severity of the infection, individual resistance and proper treatment. If proper treatment is not introduced, the disease includes mastoid air cells.

Stage of acute mastoiditis- continuing infections causes hyperemia and reinforcement of mucoperioseum leads to bony erosion. Clinical symptoms include abundant, purulent, pulsed ears' ears for more than two weeks after the attack on acute suppurative otitis media indicates mastoiditis. Mastoid tenderness is another sign of inflammation.

#### **Diagnosis:**

Diagnosed clinically. The hearing test shows conductive deafness. CT temporary bone shows air cell clipping in mastoiditis.

Bacteriological examination of ear discharge to identify the causative organism.

#### **Chronic Suppurative Otitis Media (CSOM)**

CSOM is a chronic inflammatory process including a cleft of the middle ear and produces irreversible pathological changes. It is characterized by perforation of the tympanic membrane and persistent drainage from the middle ear, which lasts more than 6-12 weeks. Perforation becomes permanent when its edges are covered with a spinocellular epithelium and does not cure spontaneously and becomes an epithelium lined with fistulous.

#### **EPIDEMIOLOGY:**

The incidence is higher in poor socio-economic classes. Nutrition and lack of health education are contributing factors. It affects all ages and both sexes. In India, the prevalence rate is higher in the rural area (46/1 000 persons) than in the urban area (16/1 000 persons).

Prevalence surveys, which are very different in the definition of diseases, sampling methods and methodological quality, show that the global burden on CSOM involves 65-330 million individuals with drainage ears, of which 60% suffer from significant hearing damage. CSOM represents 28,000 deaths and diseases of the disease more than 2 million Dalys. More than 90% of the burden bears the country in Southeast Asia and the Western Pacific in Africa and several ethnic minorities in the edge of the Pacific. CSOM is unusual in America, Europe, the Middle East and Australia.

#### **Aetiology:**

Few attacks of acute middle ear infection that could not be completely resolved.

- Acute infectious diseases in childhood.
- Failure of ventilation and pocket formation.
- Long standing secretis media.
- The insidious chronic keratinization process observed in the attic and the poster part of the tympanic membrane.

#### **BACTERIOLOGY:**

Aerobic and anaerobic bacteria cause CSOM. Between the aerobes of *Pseudomonas aeruginosa*, *B. Proteus*, *E. Coli*, *Staphylococcus aureus*, etc. and anaerobes include *Bacteroids*, *B. fragilis* etc. Anaerobes multiply because the absorption of air occurs from the cleft of the middle ear due to granulation and cholesteatoma.

Factors responsible for chronicity CSOM:

- Poor drainage of inflammatory exudates.
- Dysfunction of the Eustachian tube, permanent tube, etc.
- Aerobic and anaerobic flora.
- Middle ear infection from nasopharynx and airways in chronic respiratory diseases.
- Osteitis and granulation tissue blocking drainage.
- The presence of keratinizing spinocellular epithelium and debris helps the growth of the body and also the formation of cholesteatoma.
- Diffusion mucous membranes are changed with scarring and devascularization.
- Immune deficiency and recurring upper respiratory tract infections.

#### **CSOM types:**

**Tubotympanic Type:**

Is a safe or benign type. Usually it starts in the children's hood and as a complication of the media acute utitis, where the persistent perforation of the tympanic membrane. If perforation is not healed after the initial acute attack due to persistent infection, if continues to the edges of perforation, is covered with a squamous external surface of the epithelium from the outer surface. A patient with such a type of perforation is subject to persistent or recurring discharge to infection of the upper respiratory tract. No risk of serious complications. It is again divided into two,

#### **Type Tubul:**

The infection rises through the Eustachian tube and the basic cause lies either in the nose, cavities or nasopharynx. Usually observed in children with low socio-economic layers and includes both ear.

#### **Tympanic type:**

The infection achieves a middle ear by a defect in the tympanic membrane usually a large central perforation. Looking in adults and includes only one ear.

#### **Aetiology of tubo tympanic type:**

The continuation of the medium acute utitis - perforation of the tympanic membrane becomes permanent and allows repeated infection from the outer ear. The middle ear mucous membrane is exposed to dust, pollen and other aeroallergens causing the persistent otorrhoea.

Ascending infection using Eustachian tube.

The result of allergy to ingestion such as milk, eggs, fish, etc.

Predisposition factors:

Recurrent infections of upper respiratory tract, allergy to nasal, chronic rhinosinusitis

Enlarged adenoids, chronic tonsillitis etc.

Swimming and swimming in pools, choice of ear with infected material, etc. malnutrition and hypoglobinemia.

#### **Pathology:**

Stay located on the mucous membrane mostly in the anteroinferior part of the cleft of the middle ear. Pathological changes are-

Perforation pars TENSA - Central.

Middle ear mucous membranes - normal in an inactive stage, oedematous and velvety at an active stage.

Polyp - oedematous and inflamed mucosa protruded perforations and seen externally.

Ossicular string shows necrosis.

Tympanosclerosis- hyalinization and calcification of sub-elevate connective tissue. Looking at the remains of the tympanic membrane under the middle ear mucosa, they disrupt the mobility of the structures of the conductive deafness.

Fibrosis and adhesion- the result of the healing process and further disrupts the mobility of the aspective chain or blocks the Eustachian tube.

#### **Clinical features:**

The recurring otorrhoea discharge is watery or mucoid or mucopurulent. Rich but nonfoetid. The ear is dry between the infection. In permanent perforation, the ear is often dry for a long time.

Deafness - progressive deafness. Conductive type, mild or medium depending on the site and size of perforation.

Pain - usually absent, may be present due to secondary infection.

Diagnosis:

Otoscopy - central perforation of the tympanic membrane. It is dry between the infection. Eustachian tubes can sometimes be seen by large perforations.

The middle ear mucous membrane is found to be pink or velvety. Occasionally pale oedematous mucous membranes can protrude perforation as a polyp.

The infection source is observed in the nose or nasopharynx, which is due to the persistence of the disease.

The fork tuning test - Rinnie's test is negative and Weber's test is lateralized to the sick side. Indicates conductive deafness. In a bilateral lesion. Weber is lateralized to a more deaf ear or in the center if it is equally deaf.

The audiogram-confirms the conductive deafness with A-B GAP.

X-ray mastoid / CT temporal bone - mastoid is usually sclerotic, but may be pneumatized by air cell cloudy. No evidence of bone erosion.

Culture of discharges - for identifying the body.

#### **Disease course:**

##### **Divided into 4 phases,-**

- Active phase - the ear actively discharges.
- Rest scenes - EAR has sometimes not drained in the past, but the history of otorrhoea.
- Inactive phase-historic otorrhoea, but the ear is dry for up to 3-6 months.
- Healing phase - perforation has recovered with or without adhesive changes and the ear is permanently dry. Associated with conductive deafness of tympanosclerosis.

Treatment:

Active stage - the auditory toilet is repeated at regular intervals until the ear is dry.

This can be done with dry mopping and detonation. When otorrhoea persisted, the source of infection is sought in nasopharynx, cavities, adenoids, almonds, etc.

Once the infection reaches the middle ear from these areas through the Eustachian tube and appropriate measures are taken.

Patients' instructions:

Avoid water entry into the ear. The ear is connected to cotton. Avoid swimming and diving.

Keep auditory hygiene and avoid cleaning your ear with unclean or dirty cotton wool.

General nutrition should be improved with good food in cases of malnourished children.

The resting phase - the ear is dry with treatment and remains dry for several months. The patient is asked to follow the above preventive measures and is monitored at a regular interval at the clinic. Allergy to cold should be controlled.

Inactive phase-if the ear remains dry for 2-3 months and the patient is eager, then the closure of perforation, myringoplasty is to be closed.

#### **Atticoantral type:**

Dangerous or dangerous. It includes attic, anthrum and rear tympanum and air cells. It is a disease of bone eroding and includes adjacent structures and causes complications.<sup>15</sup> includes the poster's superior part of the cleft of the middle ear and is associated with marginal perforation. The risk of complication is high.

#### **Aetiology:**

This type occurs in the cleft of the middle ear that failed to pneumatized in early childhood due to enlarged adenoids or upper respiratory tract.

Pathology:

Basic pathological findings are,

Formation of cholesteatoma- the main pathology. It is a bag of keratinized desquam epithelium in a cleft of the middle ear, resting on a layer of fibrous tissue called matrix.<sup>15</sup> Are formed in the following ways,

By creating a pocket to withdraw-in the result of insufficient aeration of the middle ear cleft and epitympanum by tubal disfunction or obstruction, a pocket of retreat is developing in the pars flaccida or postero-superior region of the perotized epithelium. Initially, the retractable pocket is later cleaned that it has turned to SAC, keratin and keratinized epithelium is gathered in a bag with a tumor formation such as a mass called cholesteatom.

By migrating the squamous epithelium from the deeper part of the canal through the marginal tympanic membrane of the perforation voice form.

**Types of cholesteatoma:**

Congenital - is formed from embryonic epidermal cells consists of middle ear or temporary bone. The participating places are the middle ear, the cuneiform process and the angle of cerebellopontine.

Primary acquired- no history of previous otitis media or already existing perforation

Secondary acquired - there is already a preliminary perforation in TENSA Patches and often associated with Posterosuperior marginal perforation or large central perforation.

**Spread cholesteatoma:**

Once cholesteatoma is formed, the costs of neighboring structures, especially bones and include vital organs, continue to increase. In the cleft of the middle ear, cholesteatoma monitors the path of the least resistance and causes enzymatic destruction of bones. The growth of the attic cholesteatoma is limited by mucosal folds and suspensory ties of the ossicles.

Cholesteatoma destroys the bone that comes in the way, such as the ear, bone labyrinth, facial nerve channel, sinus plate and tegmen tympani.

Previously, it was assumed that bone destruction was caused by pressure necrosis, at present, bone destruction has been attributed to enzymes liberated osteoclasts and mononuclear inflammatory cells and includes collagenase, acid phosphatase and proteolytic enzymes.

Osteitis and granulation tissue include the outer attic wall and the posterosuperior edge of the tympanic ring and granulation tissue surround the area of osteitis and can fill the attic, antrum, middle ear and mastoid.

Ossicular destruction of necrosis can be limited to the incus or may include stapes, Malleus malleus or the entire ossicular chain. Thus, hearing loss is greater than the tubotympanic type.

Cholesterol granuloma-mass of granulation tissue with foreign bodies with giant cells surrounding cholesterol crystals. It is a reaction to long -term maintenance of secretion or bleeding.

**Clinical features:**

No symptoms - in the early stage of the disease remain asymptomatic.

Ear discharge - discharge is purulent, disgusting and modest occasionally colored in the blood. The discharge is so modest that the patient did not know about it. The end of the discharge in the ear continuous is a threatening sign. Perforation can be sealed with crust discharges, mucous membranes or polyp leads to an obstacle to the free flow of purulent discharges, leading to complications.

Loss of hearing and deafness. Deafness is a slow onset, progressive due to ossicular destruction and can be associated with tinnitus.<sup>15</sup> Hearing is normal when the ossicular chain is intact.<sup>16</sup> In some cases where cholesteatoma bridges the hearing of the ossicular gap can be good.

The ear cleaning may cause bleeding from granulations and red fleshy polyp.

Ear pain, vertigo, facial palsy, headache, vomiting, ataxia and fever means the onset of complications such as extracranial abscess, labyrinthitis, meningitis, facial paralysis, jugular venous thrombosis, etc. ..

**Otoscopy/ endoscopic findings-**

Perforation is either in pars flaccida (attic variety) or on the top edge of the postero (marginal). The discharge is foetid and modest.

Granulation in the attic or posterosuperior segment of the tympanic membrane.

Polyp- usually red and granulated, sometimes covered with mucous membranes with a pedicle towards the roof or posterosuperior wall.

Cholesteatoma - was considered to be pearl leaves or grayish white mass in the attic or posterosuperior quadrant.

Ossicular destruction of necrosis- bony can include a long process of incus, stapes and handles of Malleus or the entire ossicular chain.

Granuloma cholesterol-mass of granulation tissue, gives the ear drum a dark blue or black look.

Fistula test- positive when erosion of lateral semicircular canal occurs.

**Investigation:**

Hearing assessment- fork tuning test- reveals conductive deafness.

Radiology-Röntgen mastoid, Towne's, Schuller and lateral views and CT scanning of temporal bone are considered to be detected by the prolongation of the disease. Mastoids are usually sclerotic, hypodense or acellular. CT and MRI are needed if the patient has any CSOM complications.

Culture of discharges to identify the body.

**Diagnosis:**

- Recurrent otorrhoea.
- conductive deafness.
- Pain due to secondary infection.
- Otoscopy shows perforation of the tympanic membrane.
- To tune the negative fork test, Weber's is lateralized into a sick ear. In the bilateral lesion webers laterized on a deaf ear or on the center.
- Audiogram-A-B Gap.
- X-ray mastoid/CT temporal bone- usually cellular, but may be as Bepocellular.
- Culture and sensitivity of discharges to identify the body.

**Treatment:**

- The aim of the treatment is to ensure that the ear is safe to eradicate the disease and prevent its recurrence.
- Conservative treatment- dry mopping, suction.
- Depending on the extent, the location of the disease and the degree of deafness, various surgery such as ossiculoplasty, mastoidectomy, tympanoplasty are performed.

**Complications CSOM:**

- Extradural abscess and perisinus abscess
- labyrinthitis and brain abscess
- Facial palsy due to facial canal erosion.

- Meningitis.
- Brain abscess.
- Mastoiditis.
- Abscess of a temporary lobe.

Study over CSOM-

The study was conducted by Sinha et al. He published a recent double blind placebo - a controlled study of homeopathy vs. Conventional treatment in otitis media.

Recent not randomized open studies Germany found pain resolution less relapses in children treated with homeopathy rather than conventional treatment. Unofficial news over the past 100 years has claimed that homeopathy is an effective treatment of otitis media symptoms.

In a prospective observational study of 131 German children with otitis media Fries et al, also recorded a complete recovery in early time for homeopathically-chewed Group VS Conventional Treated Group. Only 4.8% of homeopathically treated children eventually received the course of antibiotics.

Homeopathic approach Homeopathic understanding CSOM:

The healthy state of life, which is a harmonious state of existence, turns into a condition of the disease, which is a changed condition or state of disharmony by its own cause, which is nothing but a basic disease.

Dr. Hahnemann points to Section 80 of his organon "Incursibly larger and more important than two chronic Miasma psora, which, while these two reveal their specific internal dyscrasia, one of the general chancres, the other growing growth, there are also several people who are also struggling to compose only a few people. With several infections, which is accompanied by intolerable sensual ticking, itching, monstrous inner chronic miasm - psora, the only real basic cause and producer of all other large ones, I can say countless, form of illness".

Dr. J. H. Allen states that "Hahnemann said that if he is not in the body in the body, the organism could not be affected by any other disease, not even syphilis or scabies." "It is the basic principle of all manifestations of the disease. It is a binding of acceptance that will make the life force to accept the disease. The reception disease gate cannot enter any other way.

Homeopathic therapeutics:

People often develop middle ear infections (otitis media) during colds; However, ears infections may occur at any age. Allergies or swelling of almonds and adenoids can block eustachian tubes and sinus passages and inflammation and liquid can increase in the middle ear, cause pressure, pain and sometimes cracked ear drum and discharge. Another type of ears (otitis externa) affects the outer ear and sensitive skin inside the ear canal; It often begins with a scratch that is infected with bacteria or mushrooms (swimmers' ear), swollen, inflamed and very painful.

Aconitum Napellus: This medicine is indicated if suddenly earache, pulsating pain - often after exposure to cold and wind or after appalling experience. The person is usually terrible, upset and restless. Fever can be high and thirst is strong. Symptoms are often worse for midnight and can even awaken it.

Belladonna: Intense seizures of earache, which come and leave very at once, with heat and inflammation, indicate the need for this drug. Pain can pound or pulsate and may be worse of shocks. The person usually has a fever, flushed red face, eyes that are sensitive to light, and skin that is hot to touch. The right ear is most often affected. A child who needs Belladonna can feel sleepy with a fever, or be restless and have nightmares.

Chamomilla: Paroxysms of pain that seem intolerable suggest the need for this drug. Children may seem angry and side by side and often scream and interfere. They may feel better when they are carried constantly and walk or swing vigorously. Ear pain and other symptoms are worse of heat and wind and faces (often only one) can be hot and red.

Ferrum phosphoricum: This medicine can soothe the pain and inflammation of the ear infection - or even stop if they are served when the symptoms have just begun to manifest themselves. The person looks pink and flushed with fever and fatigue. The outer ear may look warm and pink and the ear drum can be slightly bulged.

Hepar Sulphuris Calycreum: This medicine is indicated when earache are very painful or the infection is advanced (with an eardrum or pus formation). Probable indications are stabbing, sticky pain "like a solution that is driven". The person is very sensitive to everything, especially cold and concepts, and can feel very vulnerable and touch.

Magnesia Phosphorica: Earache, which feels much better when heat and pressure is applied, indicates the need for this drug. Pain can mostly be neuralgic, with little evidence of fluid or infection.

Mercurius solubilis: This medicine can be useful if the ears infection is advanced, with pus, shooting and roaring in the ear. The person who needs this medicine is often very sensitive to temperatures (hot and cold), has swollen lymph nodes, insulting breath, bloated tongue and sweat and drooling during sleep.

Pulsatilla: This drug is often indicated for ears that follow or accompany colds. (Cold symptoms include a clogged nose, especially in the interior and a large amount of yellow or green mucus.) The ear can be hot and swollen, with the feeling of pushing something. Pain can be worse in the evening and at night, as well as worse heat, with a pulsating feeling. Deep itching can be felt inside, especially if the ears infections are chronic. The child who needs Pulsatilla is usually sad and tear, wants to be held and comforted.

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## CONCLUSION:

- From the study taken up to know the scope of centesimal scale in management of chronic suppurative otitis media (CSOM) in adult and old age group, I conclude with the following findings.
- Prevalence of CSOM is found more in the age groups 21 to 30 years in the present study.
- Gender-wise study shows majority of cases were males in the study
- The study of religion shows maximum cases were belongs to Hindu religion, which may be due to dominance of Hindu religion in the society.
- Study of socio-economic status shows maximum cases were belongs to lower socio-economic class.
- Allergy found to be most common predisposing factor among the patients involved in the study.

- Review of Miasmatic dominance shows maximum cases were having Syphilitic miasmatic dominance.
- Review of susceptibility shows maximum cases were having moderate susceptibility.
- Constitutional remedies like Pulsatilla, Calcarea Carb, Hepar Sulph, Merc Sol, & Silicea are the most commonly indicated remedies in majority of the cases.
- In majority of cases moderate potency (200) was used in the study.
- Result outcome of the study shows majority cases were showing Recovery as well as improvement at the end of the study.

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## SUMMARY

- The present study consisted of 30 patients of clinically diagnosed as having CSOM. Patients were selected on pre-defined inclusion and exclusion criteria's from College OPD, IPD and special health check-up and diagnostic camps conducted by our college.
- All the cases were studied up to the period of 6 months or up to the recovery whichever occurred earlier.
- Chronic suppurative Otitis media (CSOM) is the chronic inflammation of part or whole of middle ear cleft characterised by ear discharge, fullness, ear ache, tinnitus, giddiness, deafness and perforation.
- It frequently results in communication problems, disturbed social and personal life gradually leading to withdrawal from social activities, anxiety due to recurrency of symptoms and discomfort caused by symptoms.
- The review of the present study can be summarized as follows:
- The maximum prevalence was noticed in the age groups of 21 to 30 years of age.
- Male gender was noticed to be involved more in the study.
- Patients of Hindu religion were commonly affected by CSOM.
- Lower and middle socio-economic class peoples are commonly gets affected.
- Allergy was found to be commonest predisposing factor for the development of CSOM.
- Syphilitic miasmatic expressions are maximum in these cases.

Out of 30 cases majority of cases were received moderate potency, which shows good results.

Homeopathic medicines like Pulsatilla, Calcarea Carb, Hepar Sulph, Merc Sol and Silicea are frequently indicated medicines in cases of CSOM.

End results shows maximum cases sowed recovery and marked improvement after homeopathic medicine.

From an analysis of the above results obtained from this study it is very obvious that, the careful and definite centesimal potency selection helps in improvement and control of the clinical manifestations in cases of CSOM.

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