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An evidence based case study to assess the efficacy of Homoeopathy in Chronic Suppurative Otitis Media

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Abstract: Chronic suppurative otitis media (CSOM) is a long standing infection of a part or whole of the middle ear cleft with ear discharge and perforation of tympanic membrane. It is predominantly a disease of developing world. Because of the nature and stage of disease, an anti-miasmatic treatment is more effective for reducing the recurrence and preventing complications... the remedy prescribed based on totality and miasmatic background showed that anti-miasmatic remedies were effective in managing such cases.

IndexTerms – CSOM, Homoeopathy, Anti-miasmatic, otitis, holistic.

I. INTRODUCTION

Chronic suppurative otitis media (CSOM) is a long standing infection of a part or whole of the middle ear cleft characterized by ear discharge and a permanent perforation of tympanic membrane.[9] The infection in the middle ear cleft are always threatening by way of the possibility of their extension to the adjacent intracranial tissues. The attack usually follows a common cold or influenza. Eustachian tube is the most common route of infection and the other path is through the traumatic perforation of the tympanic membrane. [16] It is predominantly a disease of developing world. It is also the single most important cause of hearing impairment in rural population.[9].

A history of at least 2 weeks of persistent ear discharge should alert the problem. If the ear could be dry mopped well enough to see the ear drum, then the diagnosis of CSOM can be confirmed by visualization of the perforated tympanic membrane. The disease usually begins in childhood as a spontaneous tympanic perforation due to an acute infection of the middle ear, known as acute otitis media or as a sequel of less severe form of other types of otitis media. The infection may occur during the first 6 years of a child's life with a peak around 2 years.

The point of time when ASOM becomes CSOM still controversial. Generally, patients with tympanic perforation which continue to discharge mucoid material for 6weeks to 3 months, despite medical treatment, are regarded as CSOM. The WHO definition requires only 2 weeks of otorrhoea, but otolaryngologists tend to adopt a longer duration, more than 3 months of active disease. (20)

Dr. Hahnemann describes in aphorism 204-206 that all chronic affections and diseases properly so called must be cured only from within, by the Homoeopathic medicines appropriate for the miasm that lies at their root. Preliminary investigation of the miasm that lies at their root, of the simple miasm or its complications with a second or even with a third.(10) The morbific agents that are causally connected with production of diseases, were designated by a general term" Miasm or Miasma", during the time of Hahnemann.

Antimiasmatic medicines help to clear up the suppressions (in relation to the past); clear up the presenting symptoms from their root or origin (in relation to the present); and clear up the susceptibility to get infection and there by strengthening the constitution (in relation to the prophylactic aspect or future)[2].

II. Definition

Otitis media is an inflammation of a part or all of the mucoperiosteal lining of the middle ear cleft. Otitis media is essentially a clinically based disease, while during the course of disease exudation, suppuration and proliferation or necrosis of the tissue occur.[14] Two major forms of otitis media are Acute suppurative otitis media(ASOM) and Chronic suppurative otitis media(CSOM)

CSOM is a chronic inflammatory process involving the middle ear cleft producing irreversible pathological changes .(16) It is characterized by perforation of tympanic membrane and persistent drainage from the middle ear, lasting more than 6- 12 weeks. The perforation becomes permanent when its edges are covered by squamous epithelium and it does not heal spontaneously and becomes an epithelium lined fistulous tract.(9)

III. Epidemiology

Incidence is higher in poor socioeconomic classes.Poor nutrition and lack of health education are the contributing factors. Affects all ages and both sexes. In India the prevalence rate is higher in rural area (46/1,000 persons) than urban area (16/1,000 persons).(3) Prevalence surveys, which vary widely in disease definition, sampling methods and methodologic quality, show that the global burden of illness from CSOMinvolves 65- 330million individuals with draining ears, 60% of whom suffer from significant hearing impairment. CSOM accounts for 28,000 deaths and a disease burden of over 2 million DALYs. Over 90% of the burden is borne by countries in the South-East Asia and Western Pacific regions, Africa, and several ethnic minorities in the Pacific Rim. CSOM is uncommon in the Americas, Europe, the Middle East and Australia.(20)

IV. Aetiology

- Few attacks of acute middle ear infection which failed to resolve completely.
- Acute infectious diseases in childhood.
- Disorder of ventilation and retraction pocket formation.
- Long standing secretory otitis media.
- Insidious chronic keratinizing process seen in attic and postero- superior part of tympanic membrane.(8)

V. Predisposing factors

- o Recurrent upper respiratory tract infection, nasal allergy, chronic rhinosinusitis
- o Enlarged adenoids, chronic tonsillitis etc..
- o Bathing and swimming in pools, picking of ear with infected material etc..
- o Malnutrition and hypoglobinaemia.(8)
- VI. Clinical features

 \neg Recurrent otorrhoea- Discharge is watery or mucoid or mucopurulent. Profuse butnonfoetid. Ear is dry in between the infection. In permanent perforation ear is often dry for long periods.

- ¬ Deafness
- Progressive deafness. Conductive type, mild or moderate depending on the site and size of perforation.
- ¬ Pain
- Usually absent, may be present due to secondary infection.(8)

VII. Diagnosis

• Otoscopy - Central perforation of tympanic membrane. It is dry in between the infection. Some times Eustachian tube can be seen through a big perforation. Middle ear mucosa is found to be pink or velvety. Occasionally pale oedematous mucosa may protrude through the perforation as a polyp.

- Source of infection is seen in the nose or nasopharynx which is the cause of persistence of the disease.
- Tuning fork test Rinnie "s test is negative and Weber"s test is lateralized to the diseased side. It indicates conductive deafness.In bilateral lesion Weber is lateralized to the more deaf ear or in the centre if equally deaf.
- Audiogram Confirms conductive deafness with A-B gap.

• X-ray mastoid / CT temporal bone - Mastoid is usually sclerotic but may be pneumatised with clouding of air cells. No evidence of bone erosion.

• Culture of the discharge – to identify the organism.(8)

VIII. Course of the disease Divided in to 4 stages

- Active stage Ear is actively discharging.
- Quiescent stage Ear is not discharging for some times but history of otorrhoea in the past.
- \neg Inactive stage History of otorrhoea but the ear is dry for a period up to 3-6 months.

 \neg Healed stage – Perforation has healed up with or without adhesive changes and ear is permanently dry. Associated with tympanosclerosisor conductive deafness.(8)

IX. Miasmatic characteristics of ear symptoms.

a) Psoric otitis - Otitis occurs with dryness of the meatus. Meatus and canal appear dry and lustureless. Dry scales. Functional disturbance of the ear. Constant itching, sensation of crawling, dryness and pulsation in the ears. Very sensitive hearing. Sound causes pain in the ears. Nervous restlessness and anxieties may accompany.

b) Sycotic symptoms: Profuse exudation. Ear appears swollen and thick about the pinna and can be oedematous. Stitching, pulsating, wandering pains. Incoordination in the sense 25 of hearing causes the Patients hears better in noisy places. Ear pain < during day and by change in the weather. Pain in the ear make the patient physically restless.

c) Syphilitic symptoms: Ulceration. All structural and organic ear problems .Mastoiditis occurs with degenerative changes in the bones. Degenerative inflammation and destruction of the ossicles of the ear. Burning , bursting and tearing ear pains. Impairment and total loss hearing may occur. Otitis media with offensive discharge of pus < at night and from warmth. Otitis media is a concomitant with common cold, eruptions, meascles, chicken pox etc.[2]

X. Leading Anti-Miasmatic remedies

A. Psora - Calc. Carb., Capsicum, Graphitis, Hepar. Sulph., Lyco., Phosphorus, Psorinum, Sulphur, Tuberculinum, Zincum. Met..

B. Sycosis - Causticum, Medorrhinum, Merc. Dulcis, Merc. Cor, Natrum. Sulph ,Nitric acid, Pulsatilla,Pyrogen, Sepia, Staphysagria, Thuja, Tuberculinum.

C. Syphilis - Aurum. Met., Fluoric acid, Merc. Sol., Mezerium, Nitric Acid, Phosphorus, Phytolocca, Tarendula, Syphillinum, Silicia, (2)

XI. CASE STUDY :-

PERSONAL DATA Date : 14/11/2022 Name of the patient: Mrs. R Age : 57 yrs Sex : F Religion: Hindu Nationality: Indian Occupation: Housewife Family size: 4 Members Diet : Mixed Address: Rajkot

. H/O PRESENT ILLNESS;

The patients complaints of itching and purulant discharge from right ear since her 15 yrs of age. She has done a surgery for this complaint. She took Allopathic and Ayurvedic medication. But she didn't get any relief.

H/O PREVIOUS ILLNESS WITH TREATMENT ADOPTED: Since 2 yrs : Dyslipidaemia Before 8 yrs : Surgery done on right ear for CSOM.

FAMILY HISTORY: Mother - Diabetes Mellitus

2. PRESENTING COMPLAINT(s)

| Complaints with | Location & | Sensation/ | Modalities(| Concomitants/ |
|--------------------|-------------------|---------------|--|----------------|
| duration | extension | character & | <,>) & A/F(=) | associated |
| | | pathology | | symptoms with |
| | | | | duration |
| Pain, itching, | Ear (both) since | slight pain | <getting td="" wet<=""><td></td></getting> | |
| ram, nening, | Lar (0001)_since | singht pain | sgetting wet | |
| discharge of pus | childhood | Itching | < from cold | |
| on Ear(both) | (first right and | Pus discharge | exposure | |
| Since childhood | then left) | Offensive | <touch< td=""><td>Impairement of</td></touch<> | Impairement of |
| (first right; then | | discharge | < cold food | hearing |
| now left) | | | | |
| | | Sound hearing | < cold drinks | Vertigo |
| | | on ears. | < cold air | |
| | | | >rubbing with | |
| | | | buds | |
| | | | | |

GENERAL SYMPTOMS : Appetite - Normal Stool - Regular Thirst - Normal Urine - Normal Sleep – Good Sweat – Normal

Mental generals : Co-operative Desire company

Reaction to: Thermal: Chilly Desire covering Aversion fanning Desire warm food and drinks.

Systemic examination:

O/E Ear: Surgical scar present on posterior part of right ear. Greenish-yellowish discharge present in left ear. Rinne's test: Right side-Negative. Left side: Negative Weber's test: Lateralised to right ear(Conductive deafness)

A. Analysis of case:

| Common symptoms | Uncommon symptoms |
|--|-----------------------------|
| Pain in ears< cold exposure | Desire warm food and drinks |
| < touch | |
| <cold foods<="" td=""><td></td></cold> | |
| <cold drinks<="" td=""><td></td></cold> | |
| <getting td="" wet<=""><td></td></getting> | |
| Vertigo | |
| Offensive pus discharge from ears. | |
| Sound hearing on ears. | |
| | |

| Mental general | Physical general | Particular |
|----------------|------------------|-----------------------------------|
| | | |
| Co-operative | D – warm food | Pain in ears |
| Desire company | and drink | < cold |
| | Thermal: chilly | exposure |
| | | < touch |
| | | <cold foods<="" td=""></cold> |
| | | <cold drinks<="" td=""></cold> |
| | | <getting td="" wet<=""></getting> |
| | | Offensive pus |
| | | discharge from ears. |
| | | Sound hearing on |
| | | ears. |
| | | |

B. Evaluation of symptoms:



C. Miasmatic Analysis

| Psora | Sycosis | Syphilis |
|------------------|--------------------|----------------------|
| | | |
| Sound hearing on | Pain in ears< cold | Offensive pus |
| ears. | exposure . | discharge from ears. |
| Itching | Vertigo | Loss of hearing |
| | | |

TOTALITY OF SYMPTOMS:

- \bullet CO-OPERATIVE
- DESIRE WARM FOOD AND DRINKS

PAIN IN EARS

< COLD EXPOSURE,

< TOUCH,

<COLD FOODS

<COLD DRINKS

<GETTING WET

SELECTION OF MEDICINE;

(repertorial/ non repertorial) Non-repertorial

SELECTION OF POTENCY AND DOSAGE; (justified) According to the susceptibility of the patient and Homoeopathic principle.

PRESCRIPTION :

Rx

MERCURIUS SOLUBILIS 200 one dose stat orally Sac Lac 4 pills TDS for 7 days

FOLLOW UP :-

22/11/2022

Discharge of pus in left ear feels slightly better; but persists. Sound heard in left ear feels better than before. Occasionally vertigo present since 1 month Generals: Good

Rx

MERCURIUS SOLUBILIS 200 one dose stat orally Sac Lac 4 pills TDS for 7 days

28/11/2022

Discharge of yellowish pus in left ear feels slightly better than before. Itching occasionally present. Sound heard in left ear feels better than before. No offensiveness of the discharge. Generals: Good Rx

Sac Lac 4 pills TDS for 7 days

06/12/2022

Discharge of pus from left ear persists as same. Itching feels better than before; but occasionally persists. Sound heard from left ear feels better than before. Generals: Good

Rx

MERCURIUS SOLUBILIS 200 one dose stat orally Sac Lac 4 pills TDS for 7 days

14/12/2022

Yellowish discharge from left ear occasionally persists. Pus like discharge from right ear persists. Pain and oedema in both ears occasionally persists. Itching present on both ears. Generals: Good Rx

MERCURIUS SOLUBILIS 1M o ne dose stat orally Sac Lac 4 pills TDS for 7 days

23/12/23

Colourless watery discharge from the left ear. Pus like thick discharge from the right ear. Itching over both ears feels better. Left ear feels blocked and hearing sensation impaired when the discharge comes. Tinnitus present in the left ear. O/E: Yellowish discharge present in the right ear. Generals: Good Rx Sac Lac 4 pills TDS for 7 days

03/01/2023

Pain and itching on both ears feels better;but persists. Tinnitus present in left ear. Watery discharge present from left ear. Generals:Good O/E: Weber's test: Lateralised to the right ear Rinnie's test: Left side: Negative(BC>AC) Right side-Negative. Rx - Sac Lac 4 pills TDS for 7 days

11/01/2023

Tinnitus better than before. Tinnitus absent in left ear; oozing of discharge from left ear feels stopped. Itching in both ears reduced markedly. So patient was prescribed SL and asked to return if any complaint arises Rx - Sac Lac 4 pills TDS for 7 days

Conclusion :-

In modern medicine the line of management is antibiotics, antibiotic ear drops, analgesics, nasal decongestants and Myringoplasty for perforation . Prolonged use of these medicines leads to suppression of the symptoms and the disease goes to deeper level results in serious complications.

Recurrent attack of otorrhoea, conductive type of deafness, otalgia due to secondary infection and otoscopy shows perforation of tympanic membrane are the features. [8] Continued infection in the absence of proper therapy produces irreversible pathological changes. The most important factor is that the outcome of otitis media is total hearing loss if it remain untreated. Treatment based on history, physical examination findings and investigation if needed. Homoeopathy differs with regular medicine in its interpretation and application of several fundamental principles of science. It is these differences of interpretation and the practice growing out of them which give Homoeopathy its individuality and continue its existence as a distinct school of medicine.[7] A healthy life style and antimiasmatic treatment with Homoeopathy will lower the prevalence and complications of CSOM.

In Homoeopathy, according to Dr. Hahnemann diseases are dynamic in origin and these dynamic diseases are classified in to acute and chronic. Chronic diseases are due to chronic miasms. These miasms are inherited in our body, when these chronic diseases are treated with anti-miasmatic remedies it act on the vital force and improves the immunity of the patient, lessens the chance of disease going in to the deeper level and reduces the complications

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