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EFFICACY OF HOMOEOPATHIC MEDICINE IN THE TREATMENT OF EAR DISCHARGE THROUGH KENT REPERTORY.

[1]Dr. Nagendra Kumar Sisodiya, [2]Dr Ishita Singh
M.D.(Hom.), Ph.D (Sch), Assist. Prof., Dept. of Pathology, State Homoeopathic Medical College & Hospital, Ghazipur, U.P 233001
M.D.(Hom), Assist. Prof., Dept. of Forensic Medicine & Toxicology, State Homoeopathic Medical College & Hospital, Ghazipur, U.P 233001

ABSTRACT: Otorrhea is defined as fluid discharge from the ear. Otorrhea has many causes, including disease middle ear infection, perforation of the tympanic membrane, or pathology of the outer ear canal. Otorrhea can be a sign and a symptom, and currently it is among the most common reasons for patients to seek medical treatment from an ear, nose, and throat (ENT) specialist. Many patients with otorrhea do not require hospitalization, but they do require several outpatient visits. Otorrhea is typically seen in one of the following five forms: purulent (the most common), serous, mucoid, clear, or bloody. There are several known causes of otorrhea; inflammation is the major cause of purulent, serous, and mucoid otorrhea, while head and/or ear injury are among the most common reasons for clear and bloody otorrhea.

DEFINITION:

Chronic suppurative otitis media (CSOM) is persistent inflammation of the middle ear or mastoid cavity. Synonyms include "chronic otitis media", chronic mastoiditis, and chronic tympano mastoiditis. CSOM is characterized by persistent or intermittent ear discharge (otorrhea) over 2 to 6 weeks through a perforation of the tympanic membrane. CSOM usually begins as a complication of persistent acute otitis media (AOM) with perforation in childhood. Typical findings may also include thickened granular middle-ear mucosa and mucosal polyps. Occasionally, CSOM is associated with cholesteatoma in the middle ear.

KEYWORDS: Otorrhea, Homoeopathy, Kent repertory

EPIDEMIOLOGY:

- Incidence-higher in developing countries because of poor socioeconomic standards, poor nutrition and lack of health education.
- Both sexes
- All age groups.
- In India, the overall prevalence is 46 and 16 persons per thousand in
- Rural and urban population.
- It is also the single most important cause of hearing impairment in rural population.

SITE OF EAR DISCHARGE

1. EXTERNAL: EAR Otitis externa, Necrotizing otits externa, Trauma
2. MIDDLE EAR: Acute otitis media, chronic otits media, Mastoitidis, Cholesteatoma, Trauma

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3. INNER EAR: Bone fracture

CHARACTERISTICS OF EAR DISCHARGE:

CHARACTERA	ETIOLOGY
Watery	Eczema of ear canal, CSF(rare)
Purulent	Acute otitis media, furunculosis
Mucoid	Chronic suppurative Otitis Media with perforation
Muco-purulent	acute otitis Media, Carcinoma of ear
Bloody	Trauma
Foul smelling	Chronic suppurative OM wit cholesteatoma

MOST COMMON TYPES OF EAR DISCHARGE:

- Acute Otitis Media (ASOM)
- Chronic Otitis Media (CSOM)

ACUTE SUPPURATIVE OTITIS MEDIA:

It is an acute inflammation of middle ear by pyogenic organ isms. Here, middle ear implies middle ear cleft, i.e. eustachian tube, middle ear, attic, aditus, antrum and mastoid air cells

AETIOLOGY:

It is more common especially in infants and children of lower socioeconomic group. Typically, the disease follows viral infection of upper respiratory tract but soon the pyogenic organisms invade the middle ear

ROUTES OF INFECTION:

1. Via eustachian tube. It is the most common route. Infection travels via the lumen of the tube or along subepithelial peritubal lymphatics. Eustachian tube in infants and young children is shorter, wider and more horizontal and thus may account for higher incidence of infections in this age group. Breast or bottle feeding in a young infant in horizontal position may force fluids through the tube into the middle ear and hence the need to keep the infant propped up with head a little higher. Swimming and diving can also force water through the tube into the middle ear.
2. Via external ear. Traumatic perforations of tympanic membrane due to any cause open a route to middle ear infection.
3. Blood-borne. This is an uncommon route.

PREDISPOSING FACTORS:

Anything that interferes with normal functioning of eustachian tube predisposes to middle ear infection. It could be:

1. Recurrent attacks of common cold, upper respiratory tract infections and exanthematous fevers like measles, diphtheria or whooping cough.

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2. Infections of tonsils and adenoids.
3. Chronic rhinitis and sinusitis.
4. Nasal allergy.
5. Tumours of nasopharynx, packing of nose or nasopharynx for epistaxis.
6. Cleft palate.

PATHOPHYSIOLOGY:

- Stage of tubal occlusion.
- Stage of presuppuration.
- Stage of suppuration
- Stage of resolution.
- Stage of complication

CHRONIC SUPPURATIVE OTITIS MEDIA:

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. A perforation becomes permanent when its edges are covered by squamous epithelium and it does not heal spontaneously. A permanent perforation can be likened to an epithelium-lined fistulous track

TYPES OF CSOM:

Clinically, it is divided into two types:

1. Tubotympanic. Also called the safe or benign type; it involves anteroinferior part of middle ear cleft, i.e. eustachian tube and mesotympanum and is associated with a central perforation. There is no risk of serious complications.

2. Atticoantral. Also called unsafe or dangerous type; it involves posterosuperior part of the cleft (i.e. attic, antrum and mastoid) and is associated with an attic or a marginal perforation. The disease is often associated with a bone eroding process such as cholesteatoma, granulations or osteitis. Risk of complications is high in this variety

Differences between tubotympanic and atticoantral type of CSOM

	Tubotympanic or safe type	**Atticoantral or unsafe type**
Discharge	Profuse, mucoid, odourless	Scanty, purulent, foul smelling
Perforation	Central	Attic or marginal
Granulations	Uncommon	Common
Polyp	Pale	Red
Cholesteatoma	Absent	Present
Complications	Rare	Common
Audiogram	Mild to moderate conductive deafness	Conductive or mixed deafness

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Etiology:

The eustachian tube runs from the middle of each ear to the back of the throat. Normally, this tube drains fluid that is made in the middle ear. If this tube gets blocked, fluid can build up. This can lead to infection**.**

- Ear infections are common in infants and children because the eustachian tubes are easily clogged.
- Ear infections can also occur in adults, although they are less common than in children.
- Anything that causes the eustachian tubes to become swollen or blocked makes more fluid build-up in the middle ear behind the eardrum. Some causes are:
- Allergies
- Colds and sinus infections
- Excess mucus and saliva produced during teething
- Infected or overgrown adenoids (lymph tissue in the upper part of the throat)
- Tobacco smoke

Ear infections are also more likely in children who spend a lot of time drinking from a sippy cup or bottle while lying on their back. Milk may enter the eustachian tube, which may increase the risk of an ear infection. Getting water in the ears will not cause an acute ear infection unless the eardrum has a hole in it**.**

Other risk factors for acute ear infections include:

- Attending day care
- Changes in altitude or climate
- Cold climate
- Exposure to smoke
- Family history of ear infections

CLINICAL SYMPTOMS:

The onset of signs and symptoms of ear infection is usually rapid.

Children:

Signs and symptoms common in children include:

- Ear pain, especially when lying down
- Tugging or pulling at an ear
- Trouble sleeping
- Crying more than usual
- Fussiness
- Trouble hearing or responding to sounds
- Loss of balance
- Fever of 100 F (38 C) or higher
- Drainage of fluid from the ear
- Headache
- Loss of appetite

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ADULTS:

Common signs and symptoms in adults include:

- Ear pain
- Drainage of fluid from the ear
- Trouble hearing

DIAGNOSIS:

- Examination under microscope
- Audiogram
- Culture and sensitivity of ear discharge
- Mastoid X-rays/CT scan temporal bone.
- Blood test (CBC)

COMPLICATIONS:

- Hearing loss (conductive and sensorineural)
- TM perforation (acute and chronic)
- Chronic suppurative otitis media (with or without cholesteatoma)
- Cholesteatoma
- Tympanosclerosis
- Mastoiditis
- Petrositis
- Labyrinthitis
- Facial paralysis

RUBRICS OF EAR- DISCHARGE FROM KENT REPERTORY:

DISCHARGES:

Absin., æth., *all-c., alum., alumn.,* am-c., am-m., anac., anan., *ant-c., apis., ars-i., ars.,* arund., *asaf., aur.,* bar-c., **Bar-m.**, *bell., bor.,* bov., brom., *bry.,* bufo-r., *calc-f.,* **Calc-p.**, **Calc-s.**, **Calc.**, caps., *carb-an.,* **Carb-s.**, **Carb-v.**, cast., **Caust.**, *cham.,* chin., cic., **Cist.**, coc-c., colch., **Con.**, cop., *crot-c., crot-h.,* crot-t., cur., *elaps.,* ery-a., ferr-ar., ferr-p., ferr., *fl-ac.,* **Graph.**, **Hep.**, hipp., *hydr.,* iod., jug-r., *kali-ar.,* **Kali-bi.**, **Kali-c.**, kali-p., **Kali-s.**, kreos., *lach.,* lachn., Lues., **Lyc.**, meny., meph., *merc-c.,* **Merc.**, *nat-m., nat-s., nit-ac.,* **Petr.**, *phos.,* **Psor.**, **Puls.**, *rhus-t.,* sal-ac., *sang., sel., sep.,* **Sil.**, spig., **Sulph.**, tarent., **Tell.**, tep., thu., vesp., zinc.

right: Æth., elaps., *lyc., nit-ac., sil., thu.*

left: *Ferr., graph., psor.*

night: Sep.

in warm bed: Merc.

every seven days: Sulph.

blood: Am-c., *arn.,* arund., asaf., *bell.,* **Both.**, bry., bufo-r., *chin., cic.,* colch., con., **Crot-h.**, *elaps.,* ery-a., *ham.,* merc., mosch., *op., petr.,* **Phos.**, puls., *rhus-t.,* tell.

morning: Merc.

cough, during: Bell.

menses, instead of: *Bry., phos.*

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prolonged suppuration, after: *Chin.*
bloody: Am-c., ars., arund., bar-c., bell., bry., **Calc-s.**, *calc.,* cann-s., *carb-s., carb-v.,* caust., *chin.,* cic., con., *crot-h.,* elaps., ery-a., *graph.,* ham., *hep.,* kali-ar., kali-c., kali-p., kali-s., *lach.,* lyc., merc-i-r., **Merc.**, mosch., *nit-ac., petr.,* phos., **Psor.**, *puls.,* rhus-t., sep., **Sil.**, *sulph., tell.,* zinc.
brownish: *Anac.,* carb-v., *kali-s., psor.,* tarent.
caries threatening: *Asaf.,* **Aur.**, *calc-f., calc-s., calc.,* caps., nat-m., **Sil.**, sulph.
cheesy: *Hep.,* **Sil.**
clear: Bry.
copious: *Bar-m.*
ear-wax: Am-m., anac., hep., kali-c., lyc., merc., mosch., nat-m., nit-ac., phos., puls.
eruption, suppressed, after: Cist., *sulph.*
excoriating: *Ars-i., calc-p., carb-v., fl-ac., hep., Lues., lyc., merc., nat-m.,* puls., *rhus-t.,* **Sulph.**, **Tell.**
fetid: *Ars-i., ars.,* **Aur.**, bov., *calc., carb-ac.,* carb-s., *carb-v.,* **Cist.**, cub., *elaps., hep., kali-ar., kali-bi.,* kali-c., meph., *merc-c.,* **Merc.**, *nit-ac.,* **Psor.**, sal-ac., sep., **Sulph.**, **Tell.**, thu., zinc.
gluey, sticky: Graph., nat-m.
green: *Elaps., hep., kali-i.,* **Lac-c.**, lyc., *merc.*
morning: Elaps.
odorless: Lac-c.
ichorous: Am-c., **Ars.**, calc-p., *carb-an., carb-v.,* **Lyc.**, nit-ac., **Psor.**, sep., *sil., tell.*
measles, after: *Bov.,* cact., *carb-v.,* colch., *crot-h., lyc.,* merc., *nit-ac.,* **Puls.**, *sulph.*
offensive: *Ars.,* asaf., **Aur.**, *bar-m., bov.,* calc-s., *calc., carb-s., carb-v., caust., chin.,* **Cist.**, crot-h., elaps., ery-a., ferr-ar., *fl-ac., graph., hep., hydr., kali-ar., kali-bi.,* kali-c., *kali-p., kali-s.,* kreos., **Lyc.**, mang., meph., *merc-c.,* **Merc.**, *nit-ac.,* ol-j., **Psor.**, puls., sep., **Sil.**, *sul-ac., sulph., tell., thu., tub.,* zinc.
cadaverous smelling: *Ars.*
fish-brine, like: *Graph.,* **Tell.**
putrid meat, like: **Kali-p.**, **Psor.**, *thu.*
rotten cheese, like: *Bar-m., hep.*
sour: *Sulph.*
painful: *Calc-s.,* ferr-p., **Merc.**
periodic every 7th day: *Sulph.*
purulent: Æth., *all-c., alum., alumn., am-c.,* am-m., anan., arn., *arund., asaf., aur., bar-m.,* bell., *bor., bov.,* bufo-r., **Calc-s.**, **Calc.**, *caps.,* carb-an., *carb-s., carb-v., caust.,* cham., *chin., cist., con.,* cop., cur., ferr-p., gels., *graph.,* **Hep.**, *hydr.,* **Kali-bi.**, **Kali-c.**, *kali-p.,* **Kali-s.**, kino., *lach.,* Lues., **Lyc.**, *merc-c.,* **Merc.**, *nat-m., nit-ac., petr.,* phos., **Psor.**, **Puls.**, rhus-t., sacc., sal-ac., *sep.,* **Sil.**, sulph., tell., tep., thu., *tub., zinc.*
with eczema: *Calc., hep., lyc., merc., sulph.*
mercury, after abuse of: *Asaf., aur.,* **Hep.**, **Nit-ac.**, *sil., sulph.*
sulphur, after abuse of: *Calc.,* merc., *puls.*
scarlet fever, after: *Apis., asar., aur., bar-m., bov.,* brom., calc-s., **Carb-v.**, *crot-h., graph., hep., kali-bi.,* **Lyc.**, *merc., nit-ac.,* **Psor.**, *puls., sulph.,* tell., *verb.*

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sequelæ: **Aur.**, bar-m., *cact., calc.,* **Carb-v.**, *colch.,* crot-h., *hep.,* lach., *lyc.,* merc., *nit-ac.,* **Psor.**, **Puls.**, *sulph.*
serous: Elaps., tarent., *tell.*
suppressed: Alum., asaf., **Aur.**, *calc.,* **Carb-v.**, *cast., graph., hep.,* **Merc.**, petr., *puls.,* sulph., zinc.
thick: **Calc-s.**, **Calc.**, *carb-v.,* ery-a., **Hydr.**, **Kali-bi.**, *kali-chl., lyc.,* nat-m., **Puls.**, sep., **Sil.**, tarent.
thin: Ars., cham., elaps., *graph.,* **Kali-s.**, merc., petr., *psor., sep., sil., sulph.*
watery: Calc., *carb-v., cist., elaps., graph.,* **Kali-s.**, *Lues., merc.,* **Sil.**, **Tell.**, thu.
white: Ery-a., *hep., kali-chl.,* **Nat-m.**
white, milky: **Kali-chl.**
yellow: Æth., *ars., calc-s., calc., crot-h., hydr., kali-ar.,* **Kali-bi.**, *kali-c.,* **Kali-s.**, *lyc., merc., nat-s.,* petr., phos., **Puls.**, *sil.*
yellowish green: *Cinnb., elaps., kali-chl., kali-s., merc.,* **Puls.**

HOMOEOPATHIC MANAGEMENT:

Symptomatic:

- Aconite.
- Belladonna.
- Ferrum phosphoricum: First stage with pain in car and fever.
- Kalium bichromicum.
- Kalium muriaticum.
- Mercurius dulcis: Eustachian catarrh; tympanic membrane retracted.
- Phytolacca.
- Pulsatilla.
- Sanguinaria.

Pus formation:

- Calcarea sulphuricum.
- Hepar sulphur.
- Mercurius solubilis.
- Silicea**.**

Intercurrent:

- Staphylococcin.
- Streptococcinum
- **Aconite:** Pain sharp and severe; sensitive to noises external ear is bright red. Precipitated by exposure dry cold wind. Fever with unbearable pain in the ear; child screams with pain, restless, anxious. Worse; at night noise and pressure. Better; hot applications**.**
- **Apis Mel:** Sore throat with pain in the ear. Burning stinging sensation. Child restless, apathetic whiny. Thirst less. Eyes red and puffy. Worse; heat and touch. Complaints go right to left.
- **Belladonna:** Pain ear. Eardrum is red and bulging. Sever throbbing pains. Child thirstless, head hot feel cold. Fever with restlessness. Worse noise, jar**.**

- **Calcarea carbonica:** Pain ear; throbbing. Purlent discharge. Child slow, sweaty, sour and sluggish. Worse; cold and exertion. Better; heat and rest**.**
- **Chamomilla:** Pain ear; throbbing. Fever with thirst. Child is irritable, touchy averse to examination. Worse; night and cold air. Better cold application**.**
- **Ferrum phosphoricum:** Pain ear; throbbing. Fever, face alternately pale and red. Worse cold drinks, touch.
- **Hepar sulphur:** Pain ear. Sharp stitching pains. Offensive discharges, cracking on blowing nose. Hearing impaired. Fever with sweats and chill. Child; irritable, angry, touchy and averse to examination. Better; hot drinks, warmth, covering head and hot applications**.**
- **Mercurius solubilis:** Pain ear; boring, burning, pressing tearing. Discharge is blood streaked smelly yellow or green hearing impaired. Child; thirsty, restless. Worse; night, warmth of bed, blowing nose, heat and cold.
- **Pulsatilla:** Pain ear; aching, pressing, stitching and throbbing. Discharge is thick, bland yellow or green. Child affectionate and pathetic. Worse; night and heat. Better; cold, crying, gentle motion, fresh air.
- **Silicea:** Pain ear; tearing pressing. Brought on by getting chilled, change of weather, to cold. Child sweaty and chilly, timid, anxious, worn out. Worse; cold, cold drafts, cold wind, open air. Better warmth, warm wraps, hot applications humidity
- **Tellurium**
- **Aurum Triph**
- **Sulphur**
- **Thuja Occidentalis**
- **Tubercullinum**

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