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Original Research Paper

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TOPICAL VERSUS TOPICAL PLUS SYSTEMIC ANTIBIOTICS IN SAFE CHRONIC SUPPURATIVE OTITIS MEDIA(CSOM)

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ABSTRACT

Objectives: The aim of the study to assess the effectiveness of systemic antibiotics and topical antibiotics versus topical antibiotics in acive safe Chronic Suppurative Otitis Media.Comaprision between efficacy of Aminoglycosides ear drops and Fluroquinolone ear drops. **Materials & methods:** 300 patients were diagnosed with Safe CSOM on Otoscopic examination in ENT OPD. Symptoms were assessed as ear discharge(profuse), hearing loss. Sign was tympanic membrane perforation.Those patients were divided into two groups: Group A- 150 patients were given only topical antibiotics, Group B- 150 patients were given topical plus systemic antibiotics among those 75 patients instilled with topical aminoglycosides Neosporin) and 75 patients with fluroquinolones (Ciprofloxacin, ofloxacin). **Inclusion criteria:** Children above 5 years,Patient of either sex, Patient with ear discharge, Clinically Safe CSOM. **Exclusion criteria:** Children below 5 years, Immunocompromised patient, Patient not reporting for follow up. **Results:** 150 Patients were given only topical antibiotics, Remaining 150 patients were given toplical plus systemic antibiotics among those 75 patients instilled with topical aminoglycosides (Neosporin) and 75 patients with, fluroquinolones (Ciprofloxacin, ofloxacin) with systemic antibiotic (Amoxycillin+Clavulanate), More than 70% patients who came for follow up after one week with both systenic plus topical antibiotics had improvement in symptoms specifically ear discharge in short duration,Aminoglycoside (Neosporin) ear drops had better results in symptom improvement than Fluroquinolone(Ciprofloxacin) ear drops, Patients who have given only topical antibiotics had improvements in symptoms over longer duration. **Conclusion:** Topical plus systemic antibiotics when used in CSOM will result in improvement of symptoms and signs over shorter duration, Most common organism found in CSOM is Staphylococcus aurius (gram Positive cocci), Effective systemic antibiotis in CSOM is Amoxycillin+ clavulanate.

KEYWORDS : Active Safe CSOM, Topical antibiotics, Topical+ systemic antibiotics.

INDRODUCTION:

Chronic suppurative otitis media (CSOM) safe type or tubotympanic or mucosal chronic otitis media, it has 3 types i.e active, inactive and healed.In this study we are going study patients of Active CSOM. Acive CSOM is defined as chronic inflammation within the mucosa of the middle ear and mastoid, with varying degrees of edema, submucosal fibrosis, hypervascularity and infiltration with lymphocytes, plasma cells and histiocytes.

Areas of mucosa may ulcerate with proliferation of blood vessels, fibroblasts and inflammatory cells leading to formation of granulation tissue and production of mucopurulent discharge which drains via tympanic membrane perforation. and infection of the middle ear and mastoid cavity, characterised by ear discharge (otorrhoea) through a perforated tympanic membrane.

The predominant symptoms of CSOM are ear discharge and hearing loss, sign is tympanic membrane perforation. It affects people of all age groups.

CSOM is estimated to have a global incidence of 31 million patients per year, or 4.8 new episodes per 1000 people (all ages), with 22% of cases affecting children under five years of age .

The prevalence of CSOM is more in low socio economic strata. Systemic and topical antibiotics inhibit the micro-organisms that may be responsible for the infection.

AIMS & OBJECTIVES:

- To assess the effectiveness of systemic antibiotics and topical antibioyics versus topical antibiotics in Chronic Suppurative Otitis Media
- Comaprision between efficacy of Aminoglycosides ear drops and Fluroquinolone ear drops

MATERIALS & METHODS:

- Study design: Observational cross sectional study
- Study Setting: Tertiary health care hospital
- Study duration: 11 months
- Sample size: As prevalence of CSOM is 30%. The sample size comes in range of 280-300 hence total 300 patients were studied

Inclusion Criteria:

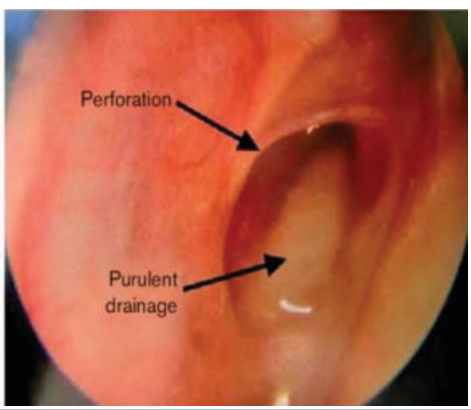
- Children above 5 years
- Patient of either sex
- Patient with ear discharge
- Clinically Safe CSOM

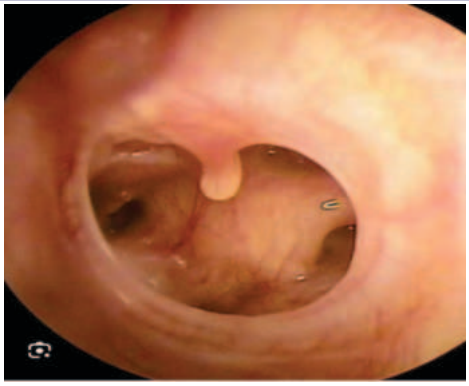
Exclusion Criteria:

- Children below 5 years
- Immunocompromised patient
- Patient not reporting for follow up

300 patients were diagnosed with Active mucosal CSOM on Otoscopic examination in ENT OPD. Symptoms were assessed as ear discharge(profuse), hearing loss.

Sign was tympanic membrane perforation. After examination with otoscope suction cleaning done and mode of treatment decided.





Tympanic membrane perforation with profuse discharge Tympanic membrane perforation with wet middle ear mucosa

Those patients were divided into two groups : Group A- 150 patients were given only topical antibiotics

Group B- 150 patients were given topical plus systemic antibiotics among those 75 patients instilled with topical aminoglycosides Neosporin) and 75 patients with fluroquinolones (Ciprofloxacin, ofloxacin) with systemic antibiotics.

RESULTS:

- 150 (Group A)Patients were given only topical antibiotics.
- Remaining 150 (Group B) patients were given toplical plus systemic antibiotics among those 75 patients instilled with topical aminoglycosides (Neosporin) and 75 patients with fluroquinolones (Ciprofloxacin, ofloxacin) with systemic antibiotic (Amoxycillin+Clavulanate).
- More than 70% patients who came for follow up after one week with both systenic plus topical antibiotics had improvement in symptoms specifically ear discharge in short duration.
- Aminoglycoside (Neosporin) ear drops had better results in symptom improvement than Fluroquinolone(Ciprofloxacin) ear drops.
- Patients who have given only topical antibiotics had improvements in symptoms over longer duration.

Graph Presentation:

CONCLUSION:

- Topical plus systemic antibiotics when used in CSOM will result in improvement of symptoms and signs over shorter duration.
- Most common organism found in CSOM is Staphy lococcus aurius (gram Positive cocci).
- Effective systemic antibiotis in CSOM is Amoxycillin+ clavulanate.