CHRONIC SUPPURATIVE OTITIS MEDIA: IDENTIFICATION OF BACTERIAL AND FUNGAL INFECTION WITH ANTIBIOGRAM- A STUDY AT TERTIARY CARE CENTRE-Original Study

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Abstract

Background The changing flora of Chronic Suppurative Otitis Media and emergence of strains resistant to the commonly employed antibiotics stimulated this study. Aim of study was to identify the bacterial and fungal flora in CSOM (Chronic Suppurative Otitis Media) and to find their antibiotic sensitivity pattern to commonly used antimicrobial agents in vitro.

Methodology: 100 cases were examined, and specimens collected and subjected to microbiological studies.

Results: Out of 100 cases, 142 ears were examined, Pseudomonas aeruginosa (36.2%) was the most common organism isolated followed by Staphylococcus aureus (24.1%) and, Klebsiella pneumonia (8.8%) Among the fungi, Candida albicans was the most common fungus which was isolated [(54%)], followed by Aspergillus fumigatus [2 (18%)]. Gram negative organisms showed high sensitivity to Ciprofloxacin, Levofloxacin, Amikacin, Gentamycin and Cefotaxime. Gram positive organisms showed high sensitivity to Cloxacillin, Erythromycin, Gentamicin, and Fluoroquinolones. Results are tabulated below.

Conclusion: Carefully selected local, systemic antibiotics guided by the culture and sensitivity, along with the use of frequent ear toilet was found to be an effective treatment modality.

Table 1: Distribution of cases and total ears according to hearing impairment

Degree of hearing impairment	**Cases**		**Ears**	
	No.	**%**	**No.**	**%**
Conductive deafness bilateral	40	40	80	56.3
Conductive deafness unilateral	56	56	56	39.5
Normal	4	4	6	4.2
Total	100	100	142	100

Table 2: Pure Growth in Culture (n=100)

Organism	Total Isolates	Percentage
Pseudomonas	36	36%
Staphylococcus Aureus	25	25%
Klebsiella	9	9%
Proteus	7	7%
E.coli	4	4%
CONS	5	5%
Streptococcus	3	3%
Aspergillus Fumigatus	1	1%
Aspergillus Flavus	2	2%
Aspergillus Niger	2	2%
Candida	6	6%
Total	100	100%