

Management of Chronic Otitis Media (Safe and Unsafe Types) At Tertiary Care Center Rajiv Gandhi Institution of Medical Sciences (RIMS) Ongole Prakasam District AP

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Abstract: Chronic otitis media is highly prevalent in the rural areas of Prakasam district due to lack of awareness of ENT diseases, and illiteracy, and lack of sufficient number of Otolologists .. and these cases are common in childhood due to recurrent Upper respiratory tract infections, adenoid hypertrophy, frequent rhinosinusitis. and these cases present highest number compared to other otorhino laryngological cases in department of ENT, RIMS Ongole. various surgical procedures, like Tympanoplasties (endoscopic and microscopic) and mastoidectomies either cortical or MRMs with or without cavity obliteration and ossiculoplasties for damaged ossicles are being done in the management of these cases..

Aim of the study: Study of various surgical procedures being done for chronic suppurative otitis media with tubotympanic type with dry central perforation and with chronic mastoiditis, ossicular necrosis and CSOM with attic perforation and with cholesteatoma, granulations, polyps, retraction pockets. This study was conducted in January 2016-2017 february. The main aim of this study is to make the ears dry, clean, safe ears and to prevent further complications, and further deterioration of the patients and secondly to improve the hearing.

Material and methods: Study of CSOM cases in an year 2016 January to 2017 February and 200 cases were selected and most of the cases were enrolled in NTR Vidyaseva programme which is prestigiously being run by the Govt of AP, and these cases are properly investigated and admitted and posted for surgical treatment after conservative management.

I. Introduction

Chronic suppurative otitis media with tubotympanic and attic antral diseases are quite common in ENT opd at RIMS Ongole, they constitute 40% of total ENT census. They present with either dry central perforation, polyps, granulations, tympanosclerotic patches, attic perforations, with cholesteatomas with or without constant purulent or mucopurulent discharge with mastoiditis. Surprisingly these cases never presented with either extracranial or intracranial complications due to as they seek of medical treatment at early stage, and using higher antibiotics and they are coming to opd with presentation of ear discharge, hard of hearing, tinnitus and itching. On examination most of these cases found to have central perforations of (either anterior, posterior, small, medium, and subtotal, total perforations), they have been investigated taking plane Xray of mastoid, audiograms to assess the hearing, pus swab from external auditory canal for culture and sensitivity for wet ears, CT mastoids, routine blood and urine examinations., and these cases were examined with otoscopy to confirm type of perforations, margins of the perforations, cleaning of the debris and finally these cases were admitted under NTR Vidyaseva programme for surgical procedures and after attaining the approval of the cases, these were posted for surgery. For dry central perforations with intact ossicles Myringoplasty either Postaural approach or endomeatal approach with 0 degree endoscope the surgery was done. For those cases with mastoiditis cortical mastoidectomy with Type I tympanoplasty were done. For those cases presented with cholesteatoma Modified radical mastoidectomy. For those cases with limited cholesteatoma or retraction pockets combined approach mastoidectomy with intact canal wall procedure done using both Endoscope and operating microscope. For those cases with MRM cavity obliteration done using fibrofatty tissues or pedicle muscle flap, And all MRM cases aesthetic Meatoplasties were done. These cases were kept in the ward and discharged on the 7th day and followed for 6 months with all post op videotoendoscopy images, postop PTA and Xray mastoids were documented.

Surgical procedures

These cases are posted for surgery under local anaesthesia, which is best for adults and cooperative cases and for children and incooperative patients general anaesthesia preferred. and all these cases after infiltration with 1% xylocaine mixed with adrenaline, sedation given ½ hr before the surgery with ½ cc fortwin and with 1cc of phenergan intravenously slowly. These cases endoscopically meatal incisions given to elevate the corners flap and standard post aural incision (wildes) given and Temporalis fascial graft harvested, and T shaped incision given over the mastoid periosteum and flaps are elevated and pinna retracted and meatus with TM exposed,

perforation edges are incised and freshened and TM flap elevated ossicles exposed ,if the middle ear mucosa healthy and dry graft kept medial to malleus,and if middle ear mucosa edematous and suspecting the pathology in antrum is suspected mastoid antrum opened with cutting burrs of various sizes and the patency of aditus checked by irrigation and graft is kept, and if there are granulations ,cholesteatoma debris present MRM done with bridge removal fascial ridge very much lowered upto incus or lateral semicircular canal, butteresses are very much reduced and necrosed ossicles are removed and reconstructed and if malleus incus are absent PORP kept and if all ossicles absent only foot plate is there then TORP kept , and in case of MRM cavities fibrofatty tissues along with muscle or perosteal flaps are repositioned in the cavities for obliteration of the cavities ,and wide meatoplasty done with removal of conchal cartilage . Depending upon the type of the disease , these procedures are being done using either with Endoscope, or microscope or using both with recording of all these procedures for documentation for NTR Vidyaseva programme which is prestigious in AP for those pts below poverty line.

II. Statistical data

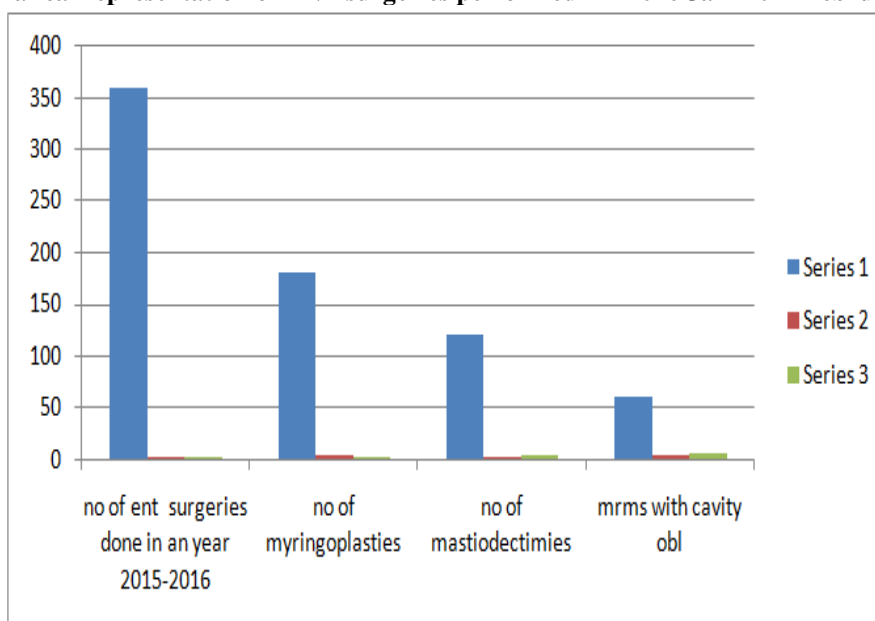
ENT Cases of various diseases in OPD - 2016 January-2017Feb.

No of pts visiting ENT op per day	100
Tonsillitis cases	10
Nonspecific throat pain	15
Non specific Neck pains	5
Nasal obstruction (DNS)	14
CSOM	30
Tubotympanic type	25
Attico antral type	5
Fb ear	1
Tear ear lobule	1
Malignancies	1
Sinusitis	8
Horseness of voice	1
Reflux esophagitis/LPR	2
Headache	7
Neck swellings	One or non
Dysphagia	4

ENT surgeries performed in 2016 Jan-2017 Febraury at RIMS Ongole

No ENT surgeries performed per year	840 cases
No of ear surgeries	360
Myringo plasties	204
Mastiodectomies with tympanoplasties	120
MRM with cavity obliteration	36

Graphical representation of ENT surgeries performed 1in 2016 Jan -2017 February



ENT OPD census in 2016 Jan -2017 Feb at RIMS Ongole

Total no of ENT pts per month	2700
Per annum	32,400
CSOM cases per month	900
Granulations	96
Polypoid granulations	12
Per annum	10,800
tubotympani type	9000
Attico antral type	1800
Cholesteatoma	720
Retraction pockets	1080

III. Conclusion

- Dry ear with Central perforation can safely be managed by Myringoplasty or Tympanoplasty.
- Cases with oedematous middle ear mucosa or with mastoiditis can safely be managed by cortical mastoidectomy and with tympanoplasty with good results .
- Cases with attic defect ,cholesteatoma debris and attic granulations needs MRM and mastoid obliteration with reconstruction of ossicular chain.
- In about 95% of cases with attic defect, deep retraction pockets,granulations ,mastoid exploration revealed cholisteatoma.
- ⊙ Proctor suggested the association of granulation tissue in 93-95% of cases of cholesteatoma. Retraction pockets were seen in few cases. 10% ossicular defects were seen in all cases.
- ⊙ In our study over all success rate was 96 (100 ears) 4 cases were advised revision surgery due to recurrent /residual disease
- ⊙ In our study the minimum age of the pt was 10 years and maximum age was 55 yrs. Maximum no of pts i.e. 35% in the age group 11-20 yrs followed by 34% in the age group of 21-30 yrs

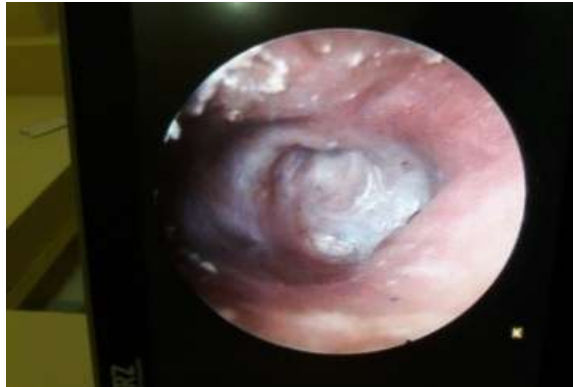
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Images of Various Surgical Procedures For Otitis Media And Out Come of Results Csom with central perforation, and attic perforation



Postop MRM with cavity obliteration healed



Post op healed MRM without cavity obliteration



Canal wall down procedure



well healed Tympanoplasty



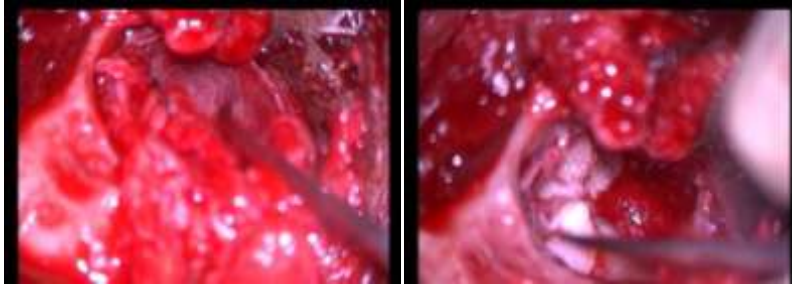
Ossiculoplasty



Simple cortical mastiodesctomy



Cavity obliteration



Cartilage slices augmentation posterosuperior

Meatoplastymeatal wall

