
Frequency of middle ear cholesteatoma, locations, extensions and complications during 1993 to 2007

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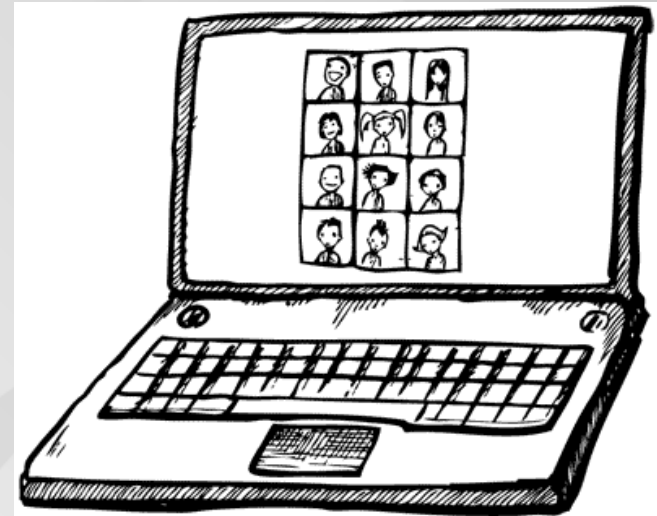
1.1. Background

- Clinical impression that larger cholesteatomas and complications are decreasing during recent years



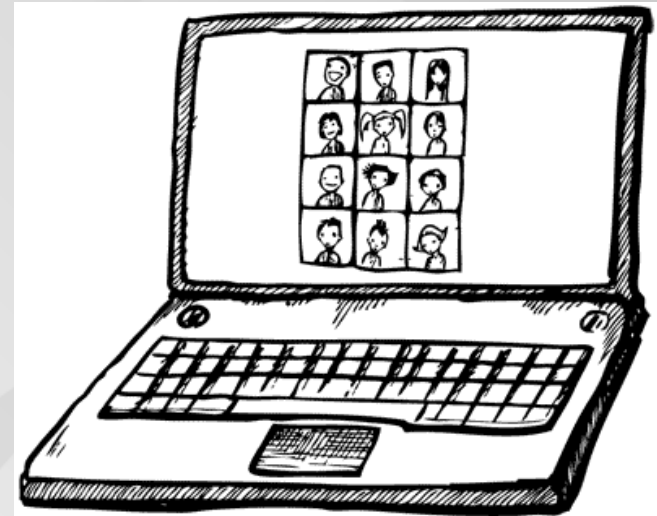
2.1. Methods - basis

- Retrospective survey 1993-2007
- Otolaryngological database containing details on
 - Location
 - Extension
 - Complications
- Patient records



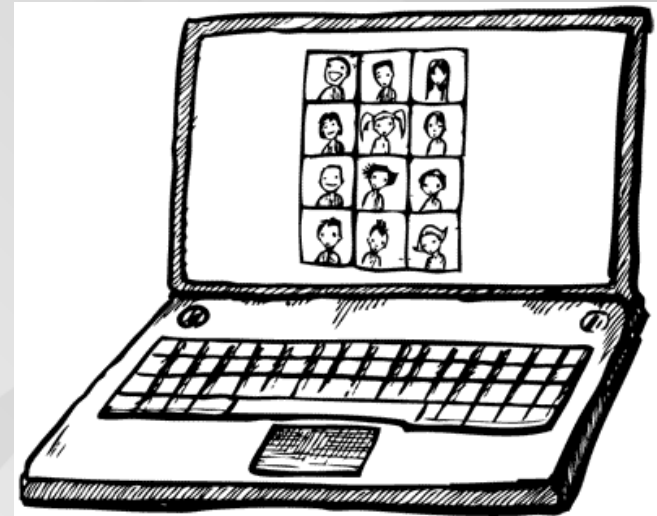
2.2. Methods – Material

- Inclusion
 - all primary cases of cholesteatoma '93 to '07
- Exclusion
 - any prior cholesteatoma surgery
 - traumatic, congenital
 - related to EECC
- 682 cases were identified
 - OBS bilateral cases
 - $682/15 = 45$ per år
 - 9 per 100,000 per år

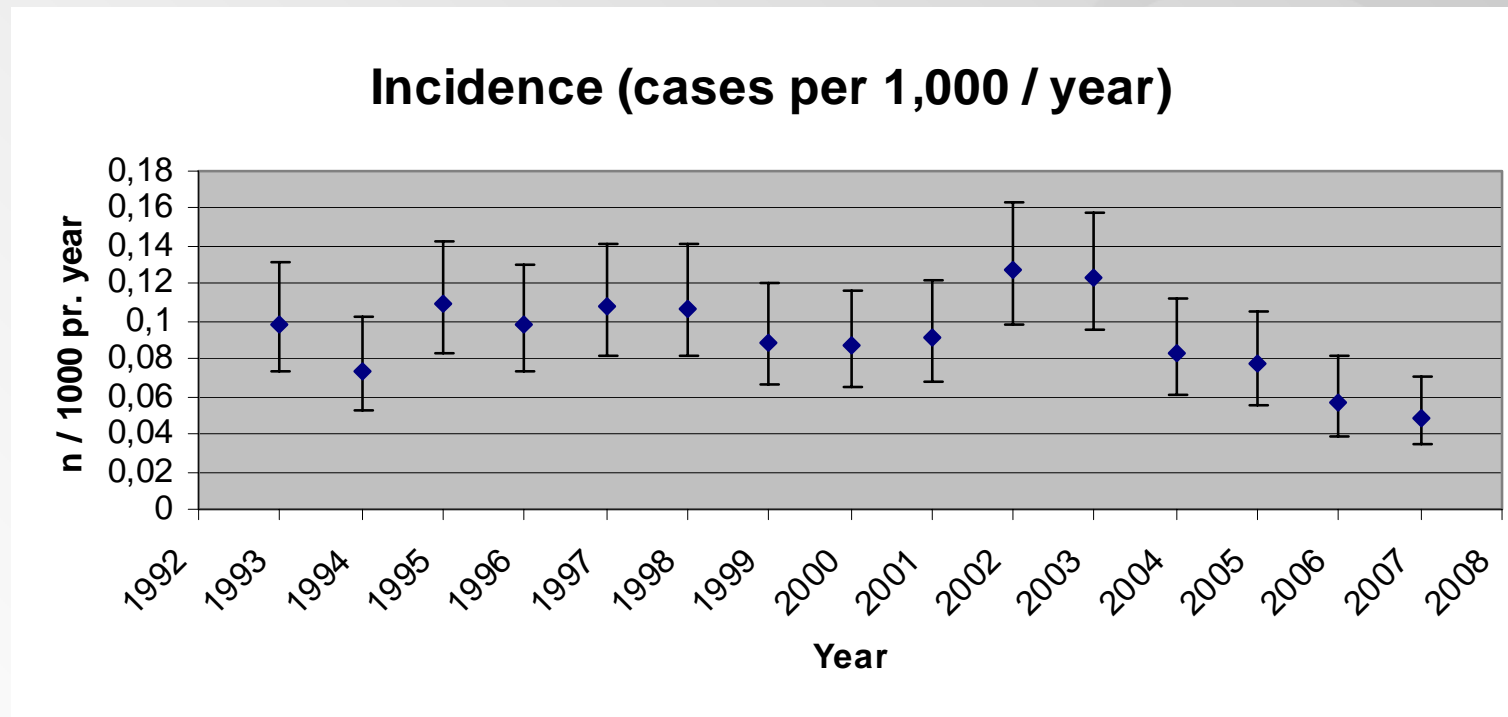


2.3. Methods – Excel data sheet

- Information retrieved
 - date of surgery, age, gender
 - type of cholesteatoma
 - flaccida, sinus, tensa
 - extent of affection
 - ME, epitympanon, antrum, mastoid (grade 1 to 4)
 - ossicular status
 - crus longum, stapes supra, others (incl fixations) (grade 1-3+)
 - complications
 - NVII and/or dura exposure, fistulas, NVII palsy, acute mastoiditis, meningitis, cerebral abscess, sinus thrombosis, brain prolaps



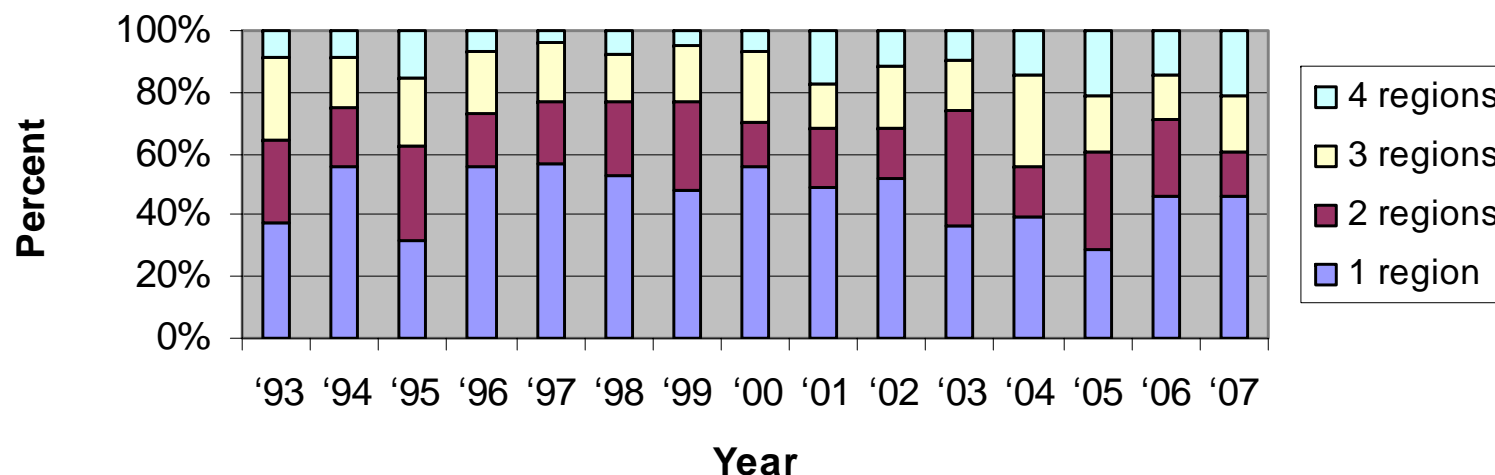
3.1. Results – Frequency of surgeries '93-'07



- Slight decrease – especially during recent years
- mean / 95 % confidence intervals
- No. of total otosurgeries vary between 250 and 300 per year

3.2. Results – Extensions of cholestatomas

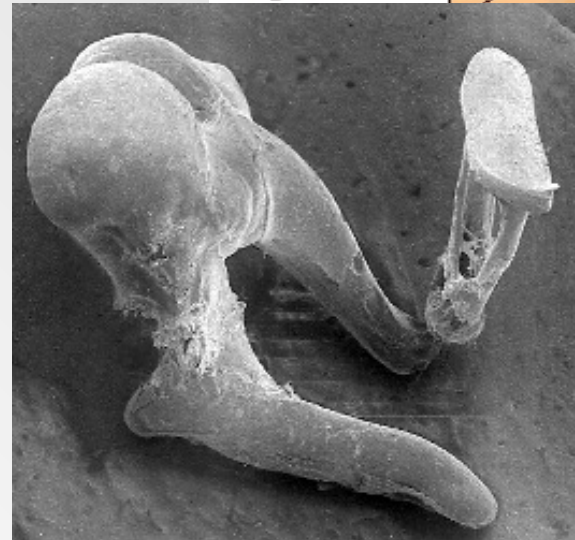
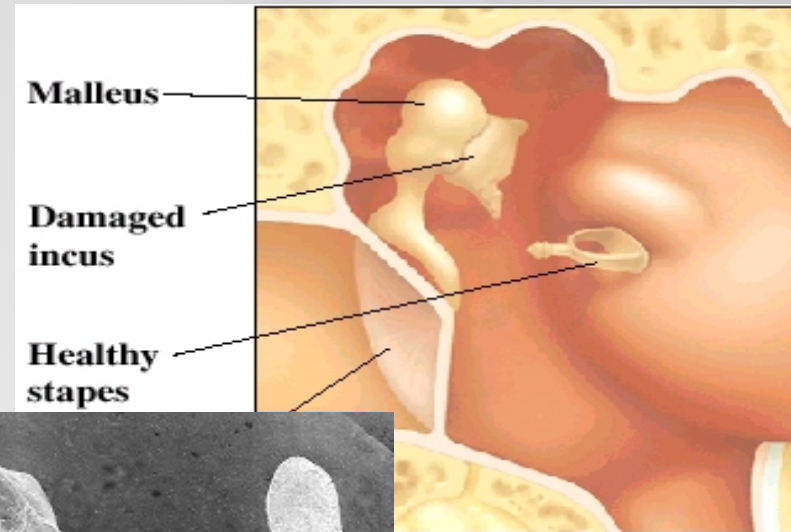
Regions affected / total number of operations



- Scores related to the numbers of regions affected
- No significant changes in No. of regions involved

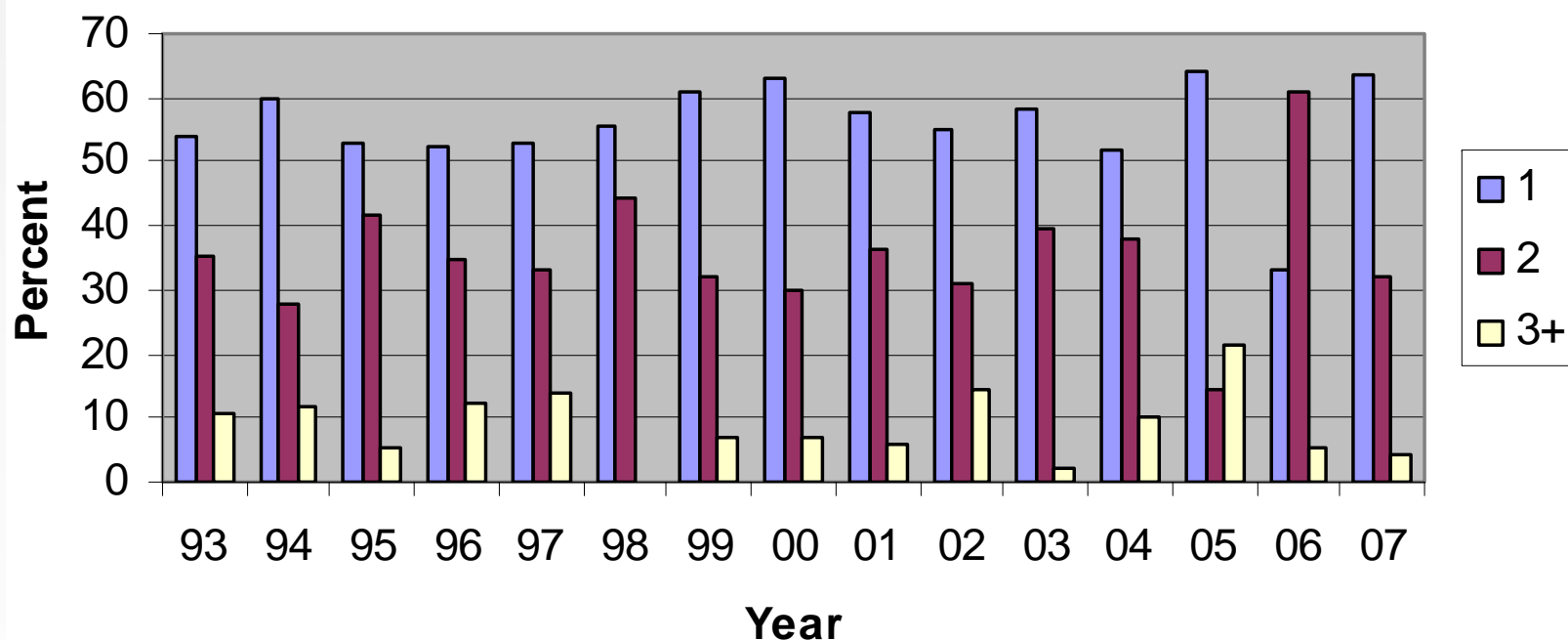
3.3.1. Results – ossicular damage

- Distribution found
 - Crus longum defect
(338/682) = 49,5 %
 - + Stapes supra missing
(72/338) = 21,0 %
 - + others incl fixations
(34/72) = 47,2 %



3.3.2. Results – ossicular damage

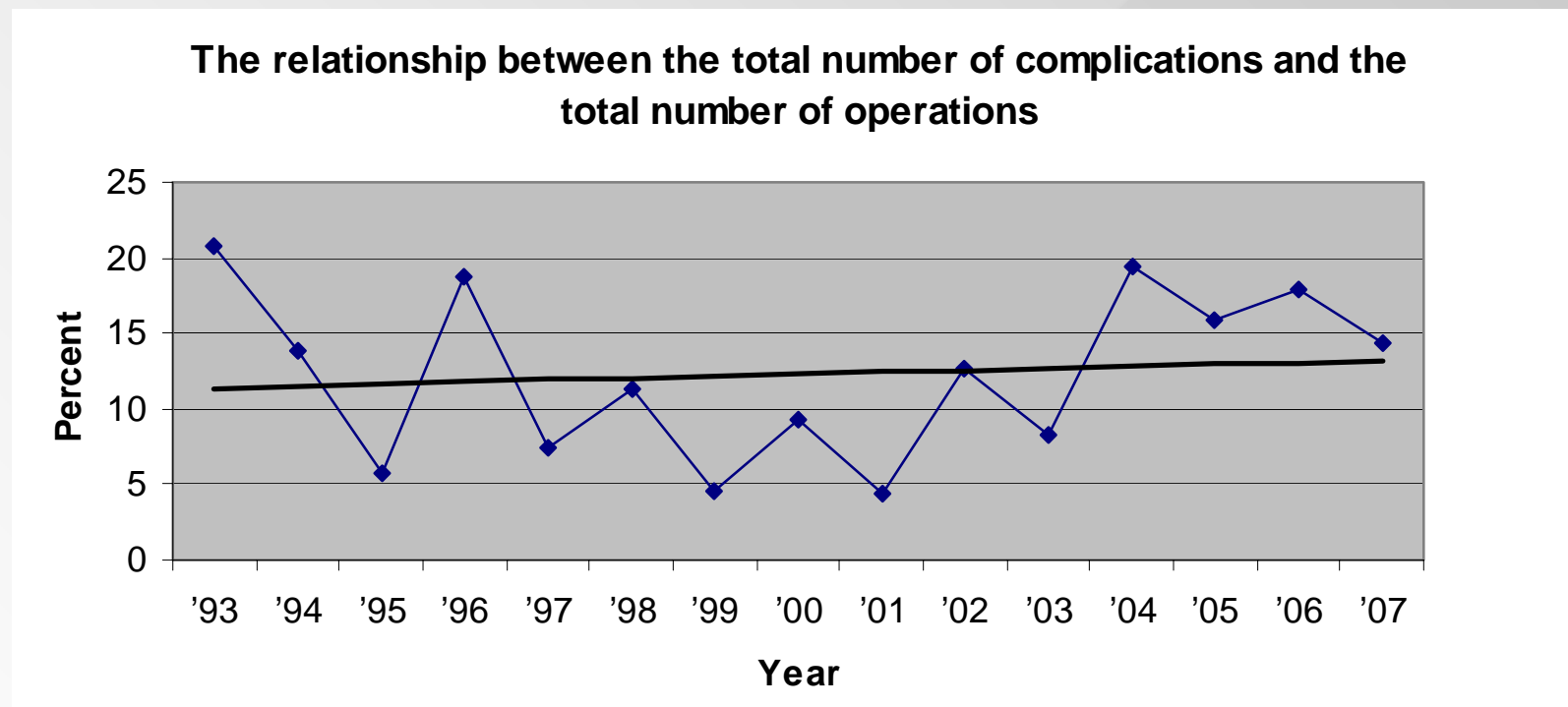
Patients with 1, 2 or 3+ ossicular damages compared to the total number of patients with damage



3.4.1. Results – complications (N=109/682)

- facial nerve and/or dura exposure 79,9 %
- fistulas 14,7 %
(semicircular canal, cochlea, footplate)
- facial palsy 3,7 %
- acute mastoiditis 1,8 %
- intracranial abscess/meningitis 0,9 %
- sinus thrombosis 0 %
- brain prolapse 0 %

3.4.2. Results – complications (time)



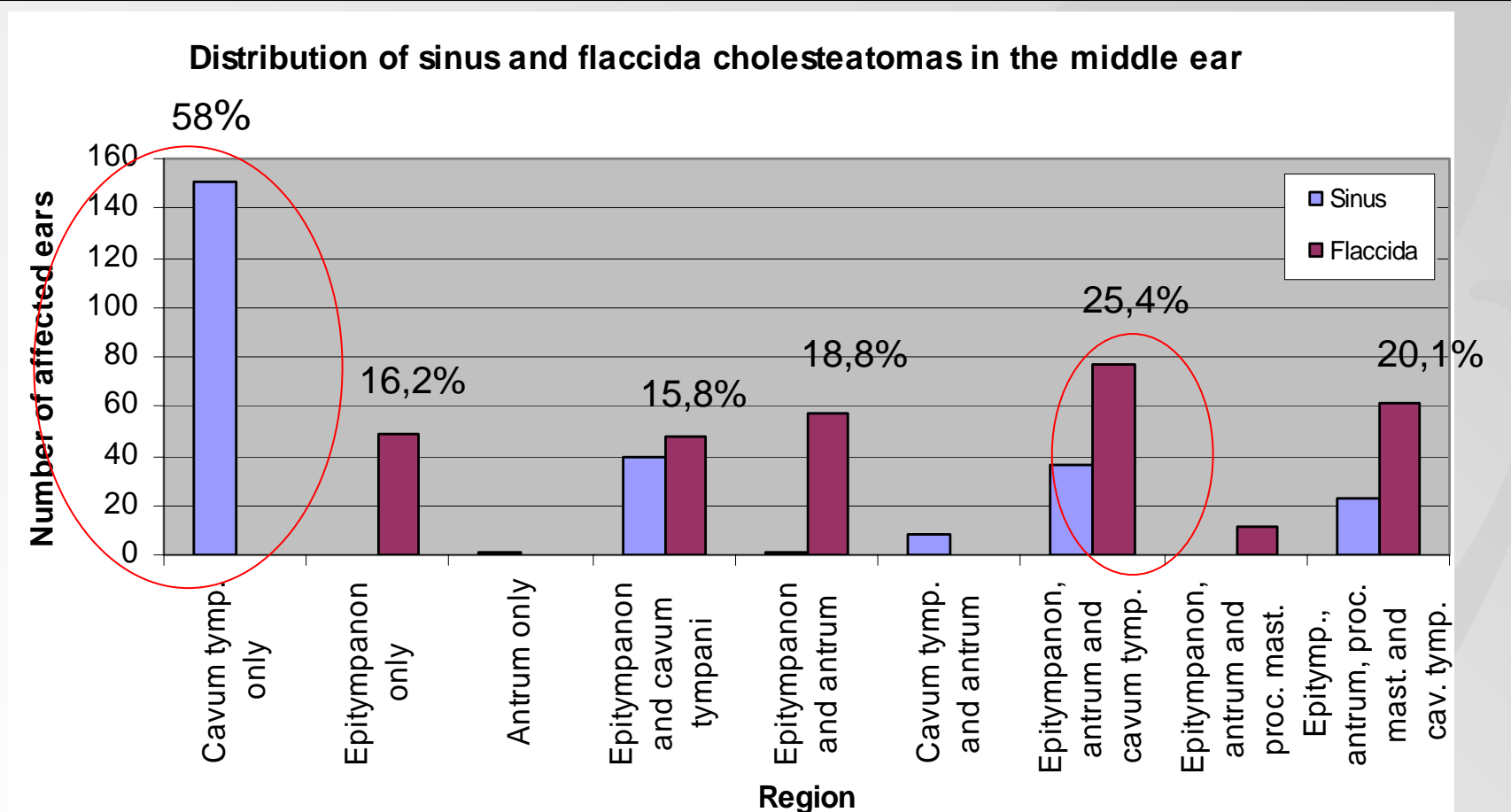
- Percentage of No. of total complications to number of surgeries per year
- Number of complications without their severity taken into account

4. Discussion

- No significant decrease in the number of cholesteatoma surgeries in the study period
- No significant overall changes in No's of
 - Extensions
 - Ossicular damages
 - Complications.....during the study period
- No's of cases with larger cholesteatomas were smaller

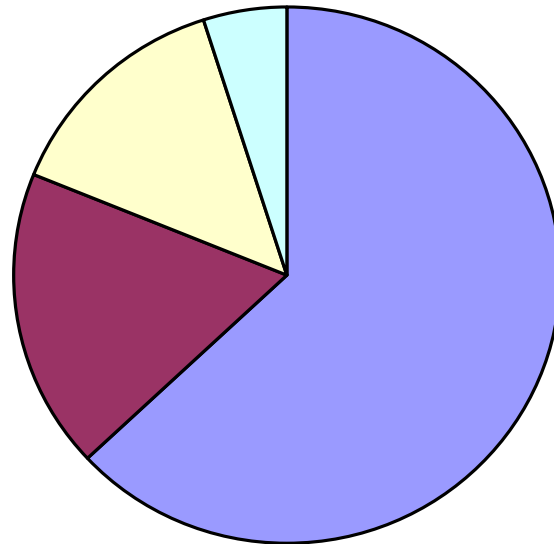


3.3. Results – Localizations of cholesteatomas



3.3.1. Results – tensa cholesteatomas

Tensa



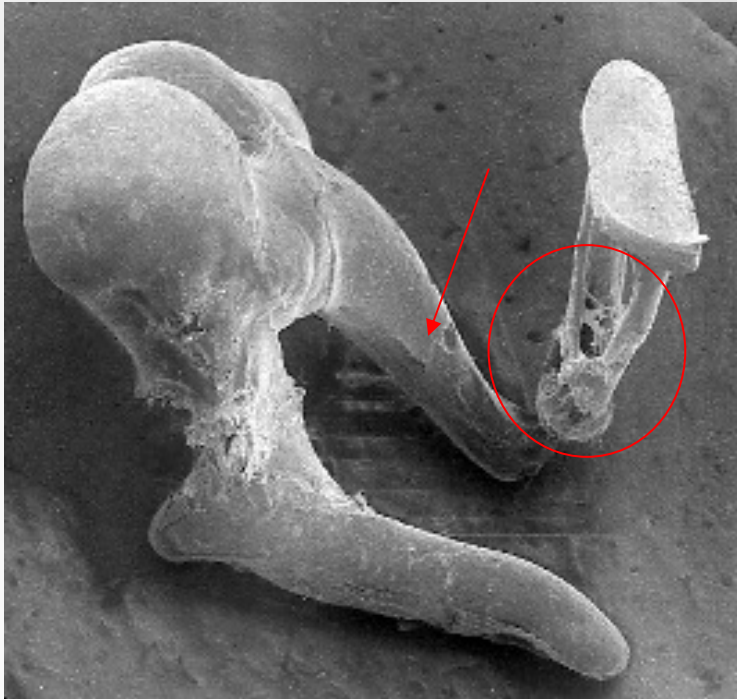
■ Cavum tympani only

■ Epitympanon and cavum tympani

■ Epitympanon, antrum and cavum tympani

■ Epitympanon, antrum, proc. mastoideus and cavum tympani

3.3. Results – ossicular damage



- Examples of ossicular damage
 - Crus longum defect
 - Stapes supra missing
 - Fixation
 - Others

