

## Perforated Tympanic Membranes

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2 types of perforations

### 1. Acute

Safe perforations- usually very small in the centre, not involves the tympanic annulus, heal well usually within 6 weeks


Unsafe perforations- large, involves the annulus (periphery), hearing is affected- need ENT referral

### 2. Chronic

a) **Attic perforations**- they are usually not holes, sucked in TM and debris collect in and perforates the TM, become osteolytic and erode the bone- resulting in cholesteatoma- need ENT referral- ENT closely F/U- remove the debris/wax collected in the attic perforation

b) **Large central perforations**- usually sequel of CSOM- nothing much can be done- ENT carefully select the patients for grafting if the hearing is affected-

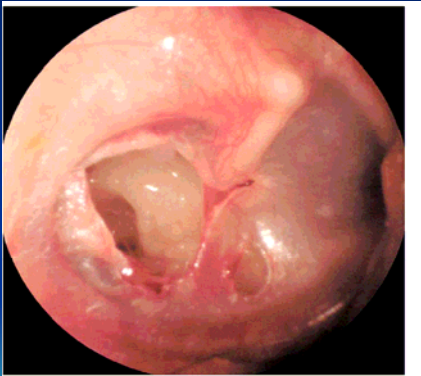
## Perforation of TM



**Iatrogenic-gromet**

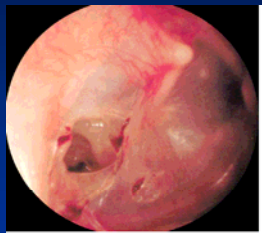
- Small inferior perforation
- Hearing will not be affected ,heal on its own
- **Rare complication**
  1. middle ear inf-from water exposure
  2. Epithelial migration into middle ear causing cholesteatoma

## Perforation of TM



- Acute perforation-  
Traumatic
- **Healing depends on**
  1. Size
  2. Fibrous tympanic annulus involvement
  3. Cause of perforation

## Traumatic perforation



- Fig.1 -14 days after perforation- 1
- Fig-2 -6wks after trauma completely healed-

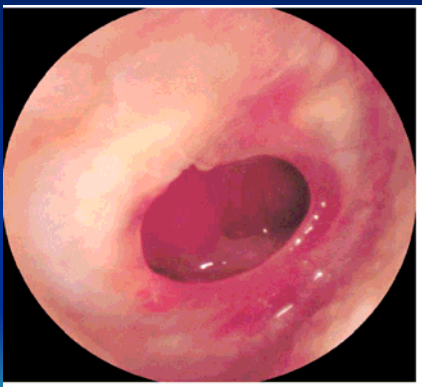


## Unsafe perforation



- *Unsafe* perforations are not in fact holes in the drum,
- they represent a retraction of the tympanic membrane. Essentially a part of the drum becomes sucked inwards and may gradually enlarge.
- When the retraction becomes extensive, keratinous debris builds up in the retraction and may become infected. This becomes osteolytic. This is essentially how *acquired cholesteatoma* develops.
- Cholesteatoma is a dangerous lesion because it is capable of eroding through bone and may cause serious and even life threatening complications - hence the use of the term *unsafe*.

## Chronic Perforation



- Sequel of AOM/COM
- Oedemstous inflammed middle ear mucosa