EAR DISEASE

A guide for the diagnosis and management of otitis media in Aboriginal and Torres Strait Islander children

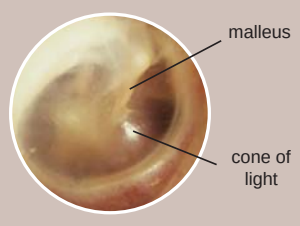
PRIORITY 1 PUS FREE FROM BIRTH TO THREE

The aim of this poster is to help identify children with ear disease early, provide antibiotic treatment, organise weekly follow ups and improve adherence to treatment. This all needs to continue until the resolution of ear discharge is achieved.

NORMAL EARDRUM

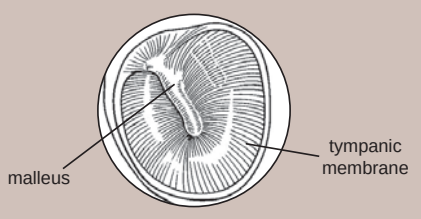
Advise families to:

- be aware of normal language milestones
- visit a health centre regularly for ear checkups
- visit a health centre if the child gets pus in their ear



Normal eardrum (R ear)

Normal eardrum (L ear)



Normal eardrum (L ear)

OTITIS MEDIA WITH EFFUSION

Ask about: hearing problems

Advise families to:

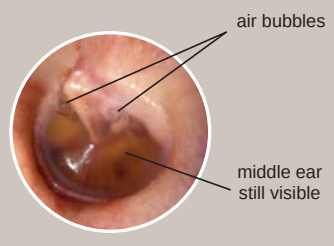
- talk a lot to babies and toddlers
- encourage children to speak and write
- tell stories and read to young children

Do:

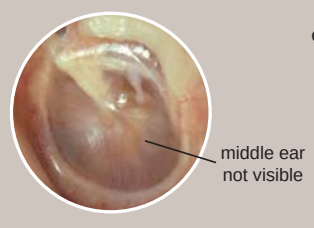
- see the child again in 3 months
- check medical records for previous history of OM

If child has OME for more than 3 months:

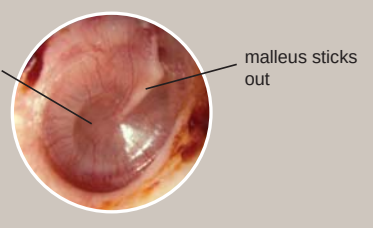
- refer for a hearing test
- refer to an ENT specialist if the child has hearing loss (>25db) in both ears
- young infants at risk of CSOM can be treated with long term antibiotics (e.g. amoxycillin 25-50mg/kg 1-2 times daily for 3-6 months)



OME (L ear)
There is thin straw coloured fluid in the middle ear. The examiner is still able to see the middle ear.



OME (L ear)
There is thick cloudy fluid in the middle ear. The examiner cannot see the middle ear.



OME (R ear)

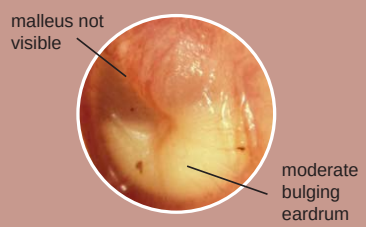
ACUTE OTITIS MEDIA

Ask about: ear pain and past ear infections

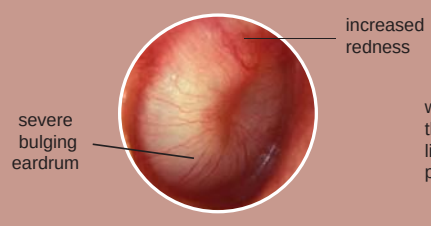
Advise families: of the risks of developing a perforation with pus

Do:

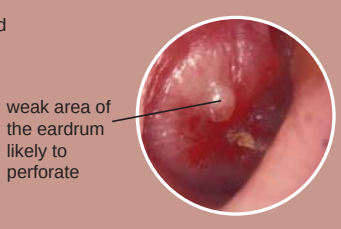
- give analgesics if the child is in pain
- if the child is under 2 years of age with AOM in both ears give antibiotics (e.g. amoxycillin 50mg/kg/day 2-3 times daily for 7 days)
- check again in 7 days, if the eardrum is still bulging or looks red increase dose to 90 mg/kg/day and talk with the doctor
- if the child is not at high risk of CSOM wait to see if the infection gets better before treating with antibiotics



Early AOM (L ear)
The middle ear fills with pus causing the eardrum to bulge. This stage is called suppuration.



Advanced AOM (R ear)



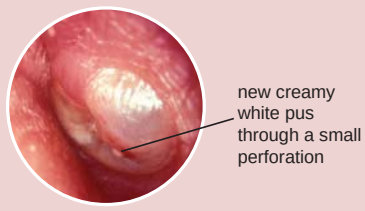
AOM before perforation (R ear)

ACUTE OTITIS MEDIA WITH PERFORATION

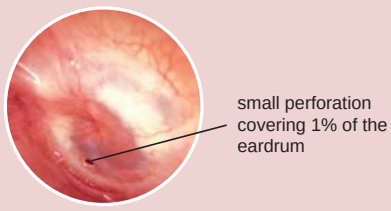
Ask about: ear pain and past ear infections
Note: the position and size of the perforation and any pus in the ear canal
Advise families: that AOMwiP frequently leads to CSOM in high risk populations if not treated properly

Do:

- organise weekly review until AOM and ear discharge resolve
- give antibiotics (e.g. amoxycillin 50-90mg/kg/day 2-3 times daily for at least 14 days)
- after 7 days if the perforation has not resolved increase dose to 90mg/kg/day or combination treatment such as amoxyxillin - clavulanate
- clean discharge in the ear canal and apply topical antibiotics
- if the child is younger than 2 years of age consider long term antibiotics (e.g. amoxycillin 25-50mg/kg/day for 3-6 months)



AOMwiP (L ear)
Eardrum is still bulging and red.



AOMwiP (L ear)
Bulging has reduced but the eardrum is still red.

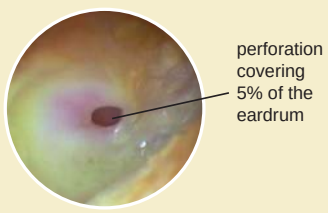
CHRONIC SUPPURATIVE OTITIS MEDIA

Ask about: the frequency and duration of discharge and signs of hearing loss
Note: the position and size of the perforation and how long discharge lasts for
Advise families:

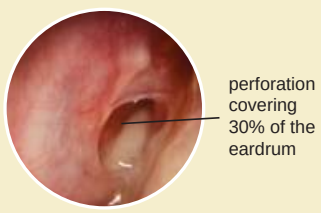
- on ear cleaning before applying topical antibiotics
- how to do tragal pumping (pressing several times on the flap of the skin in front of the ear canal)

Do:

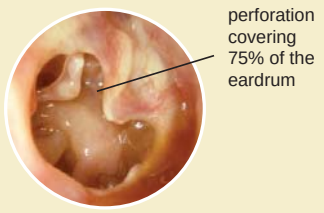
- clean the ear canal with tissue spears or syringing with dilute Betadine (1:20) then apply topical antibiotics
- prescribe topical antibiotics (e.g. ciprofloxacin 2-5 drops 2-4 times a day after cleaning) until the ear has been dry for at least 3 days
- review weekly until ear discharge has resolved
- review again in 4 weeks after the resolution of discharge
- refer to an audiologist, speech therapist and ENT specialist if CSOM persists over 3 months



CSOM (R ear)
Pus builds up on the tympanic membrane and in the external canal.



CSOM (R ear)
A mixture of creamy white pus and clear mucus can be seen draining into the external canal through a large perforation.



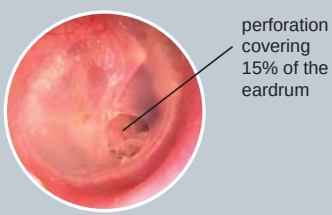
CSOM (R ear)
In the most severe cases chronic discharge can lead to the destruction of the whole eardrum.

DRY PERFORATION

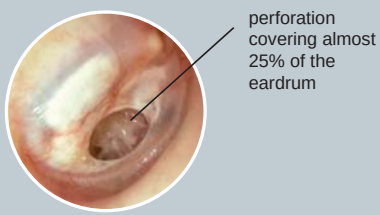
Ask about: hearing problems and the frequency and duration of discharge
Note: position and size of the perforation
Advise families: to attend the clinic if new discharge occurs

Do:

- refer for hearing test when dry perforation persists for more than 3 months
- refer children over 6 years of age with a dry perforation for more than 6 months to ENT specialist
- refer children with hearing loss greater than 20db or recurrent infection to an ENT specialist



Dry Perforation (R ear)
No pus in the ear canal.



Dry Perforation (R ear)
No pus in the canal and no inflammation.

Images were kindly donated by Dr Michael Hawke and the Ear Science Institute Australia.

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