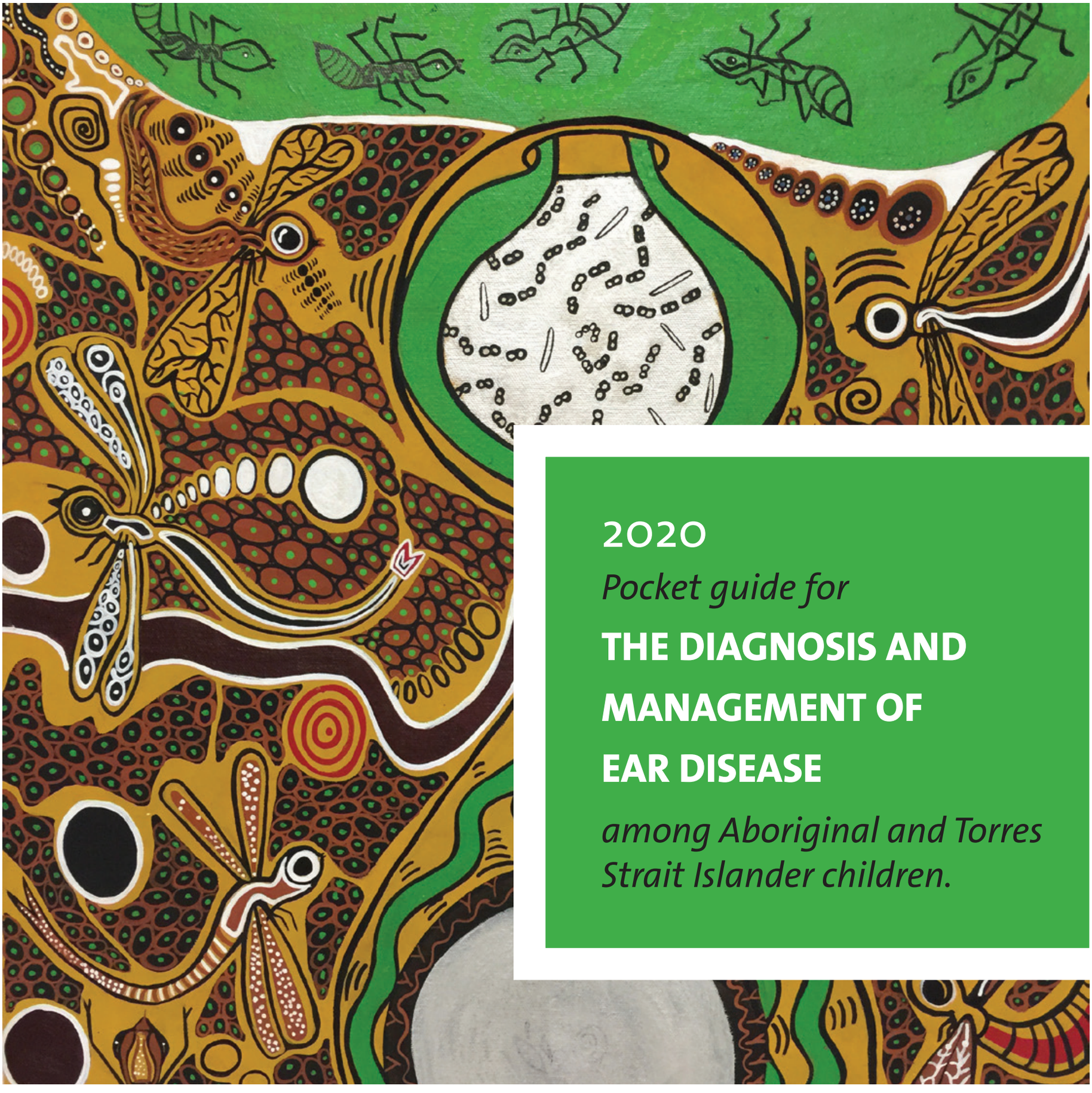
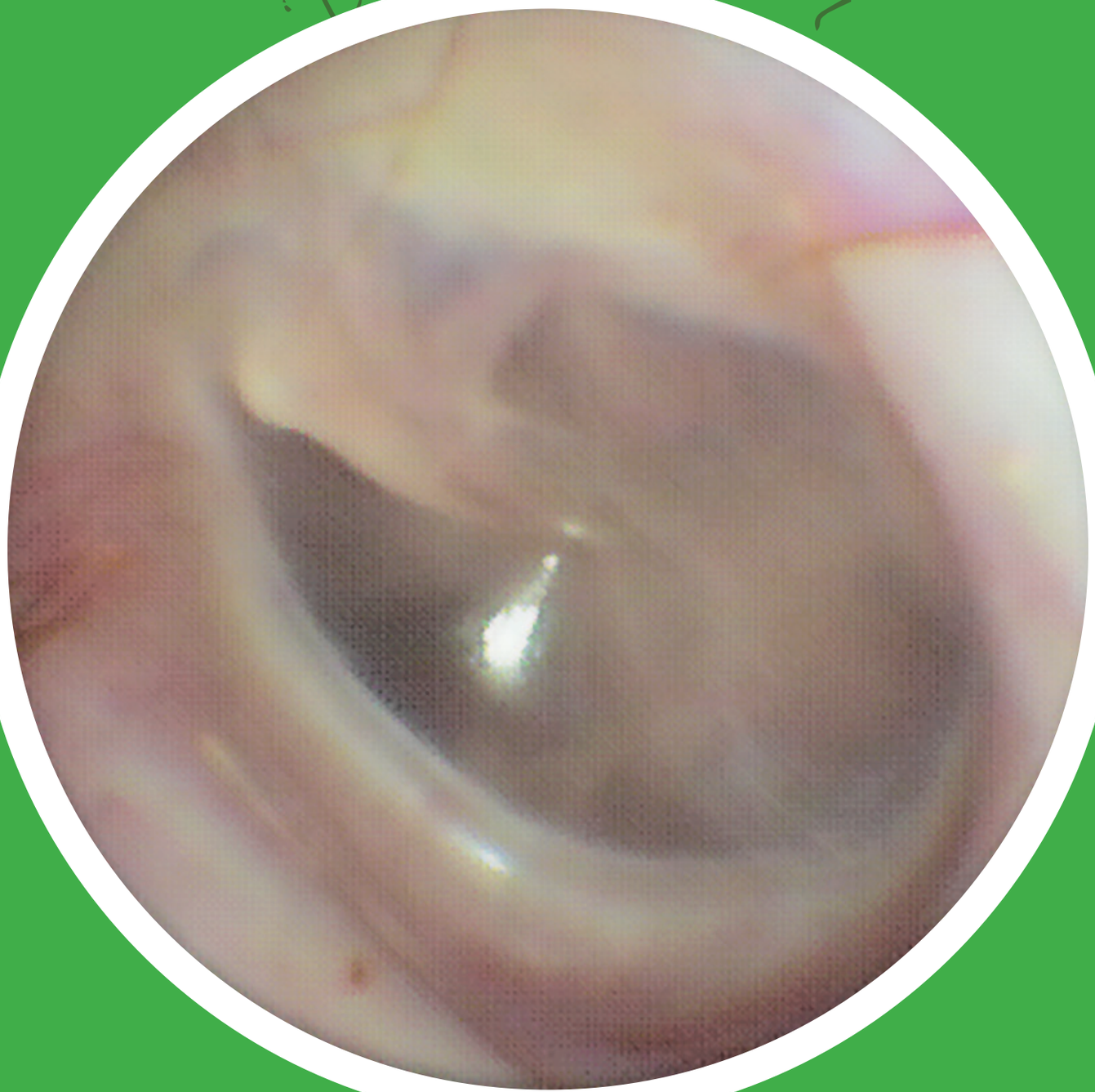


2020

Pocket guide for

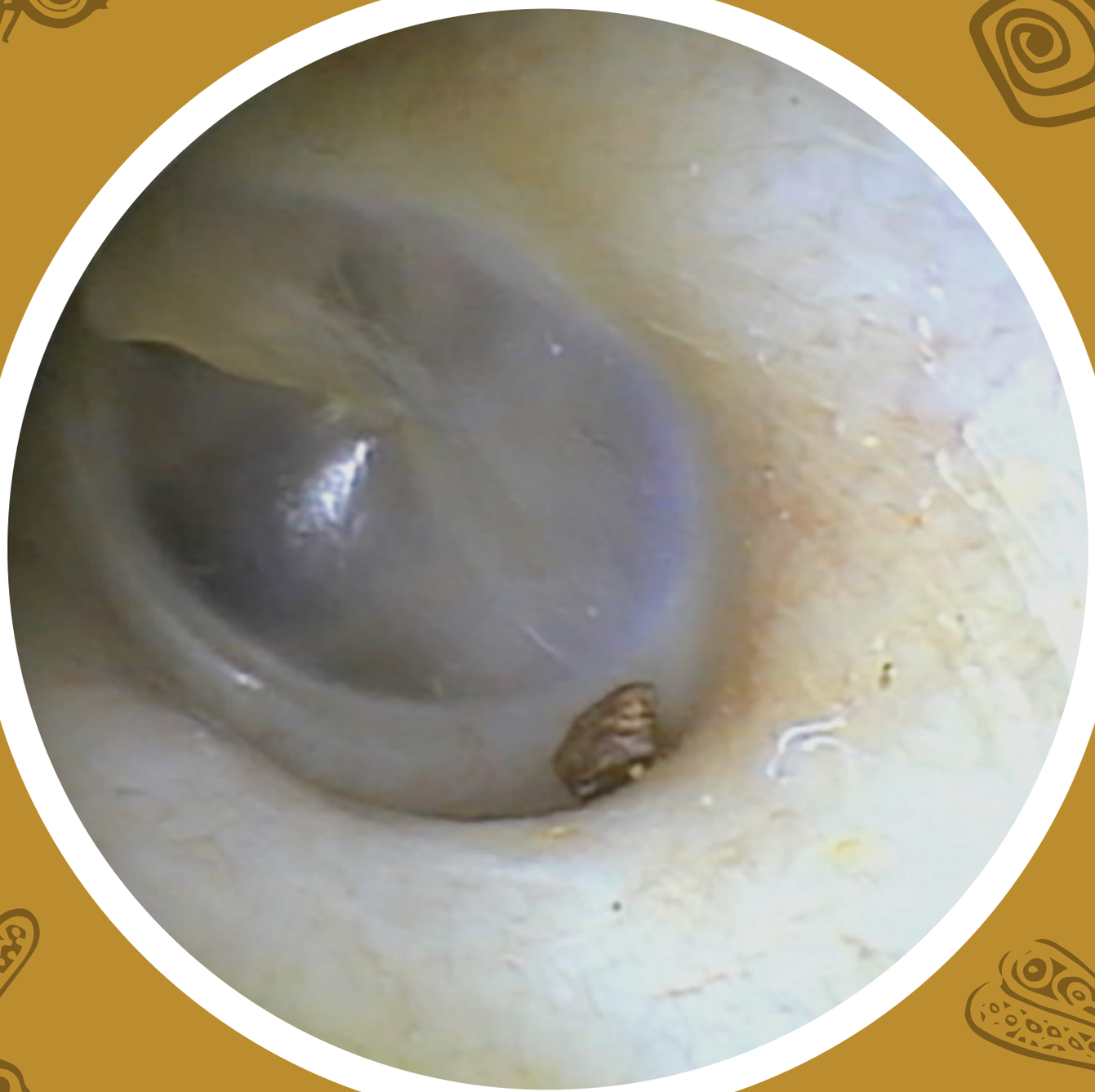
THE DIAGNOSIS AND MANAGEMENT OF EAR DISEASE

among Aboriginal and Torres Strait Islander children.



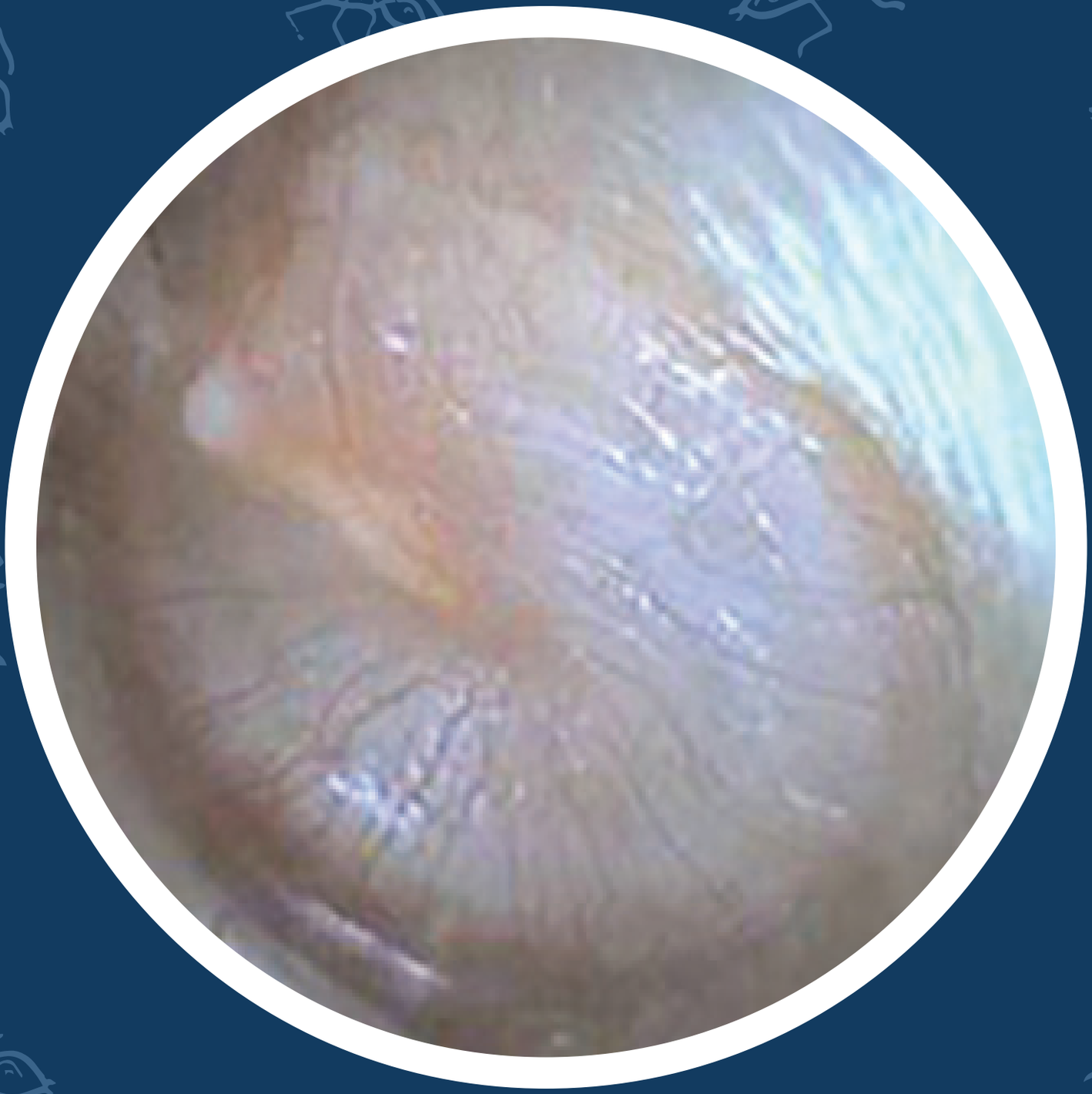
LEFT NORMAL EARDRUM

You can see through the eardrum, there is no fluid behind the eardrum and it is not bulging or retracted.



LEFT NORMAL EARDRUM

You can see through the eardrum, there is no fluid behind the eardrum and it is not bulging or retracted.



LEFT OTITIS MEDIA WITH EFFUSION (OME)

Fluid behind the eardrum without bulging or ear pain.

OTITIS MEDIA WITH EFFUSION (OME)

Fluid behind the eardrum without bulging or ear pain.

Ask: about any concerns about current language, learning, behavioural or developmental problems.

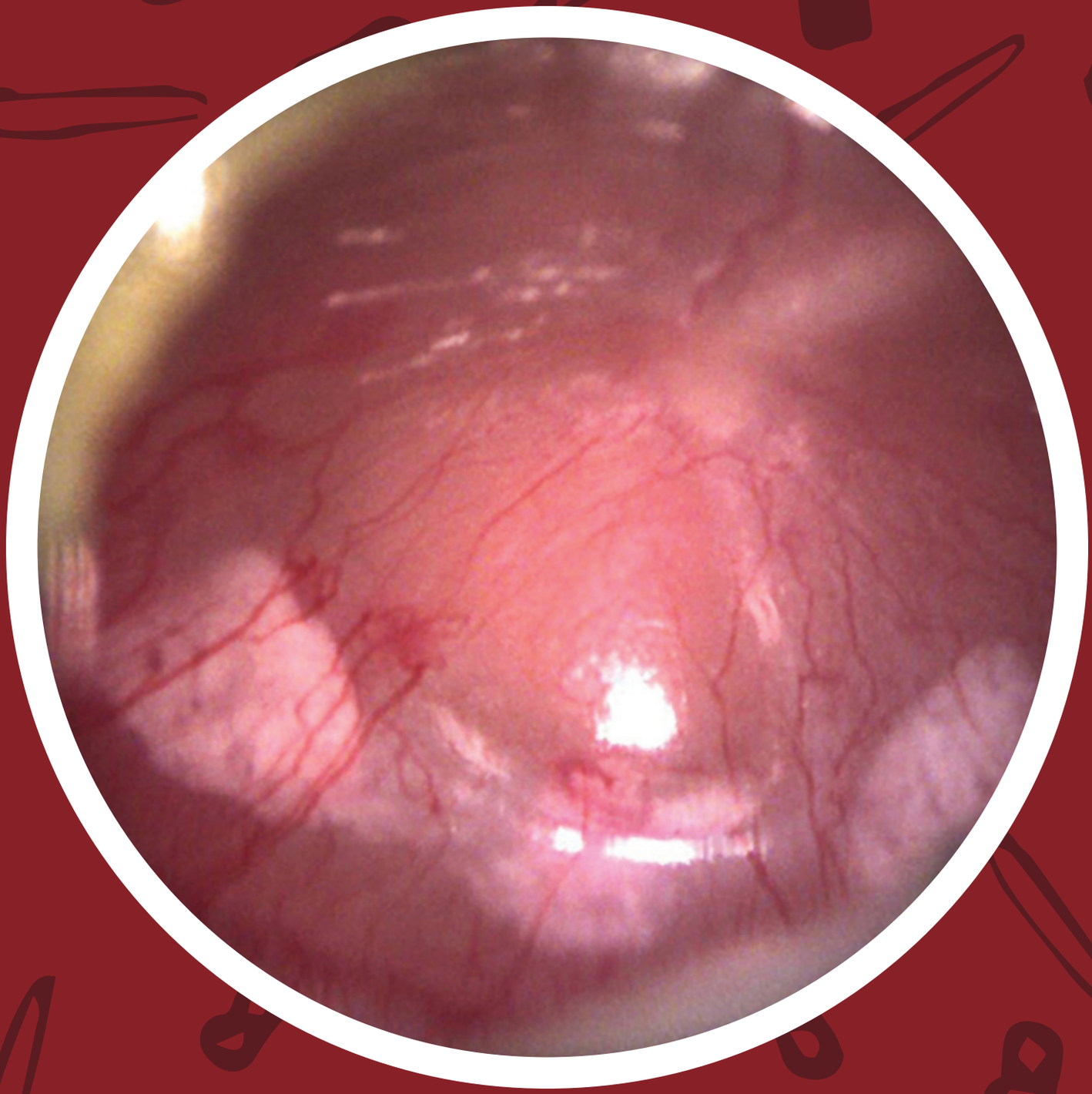
Do: Refer for hearing, speech, paediatric and/or ENT assessments. Ensure support for communication and education.

Look:

- At eardrum for signs of fluid.
- Learn to use the puffer connection to the otoscope to look for signs of fluid or use tympanometry.

Do:

- Check child again in 3 months.
- If still OME after 3 months treat as chronic OME.



CHRONIC OME

OME in either ear for longer than 3 months.

CHRONIC OME (also known as 'glue ear')

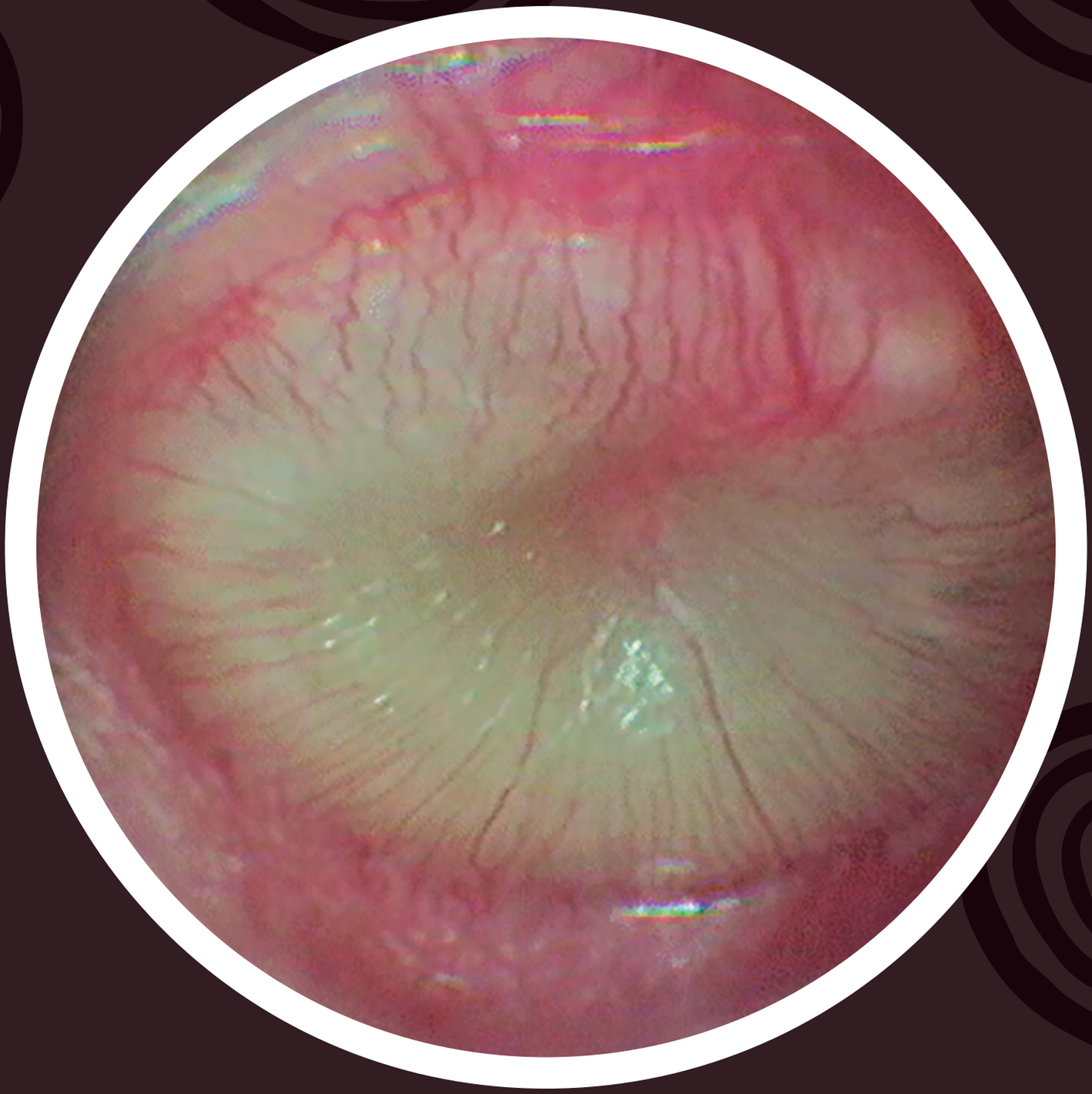
OME in either ear for longer than 3 months

Ask: about any listening behaviour or hearing problems

Look: (see OME)

Do:

- Give amoxycillin 50 mg/kg/day 2 to 3 times a day for 2 to 4 weeks.
- Autoinflation (nasal balloon blowing) may benefit some children
- Classroom amplification may benefit school age children
- Refer for hearing, speech, paediatric and/or ENT assessments. Ensure support for communication and education.
- Talk with the doctor about the hearing test results
- Refer for ENT assessment if severe retraction present (i.e. retraction pocket atelectasis)
- Recommend referral for grommet surgery if hearing loss >30dB in the better ear.



RIGHT ACUTE OTITIS MEDIA WITHOUT PERFORATION (AOMwoP)

Fluid behind the eardrum without bulging or ear pain.

ACUTE OTITIS MEDIA without perforation (AOMwoP)

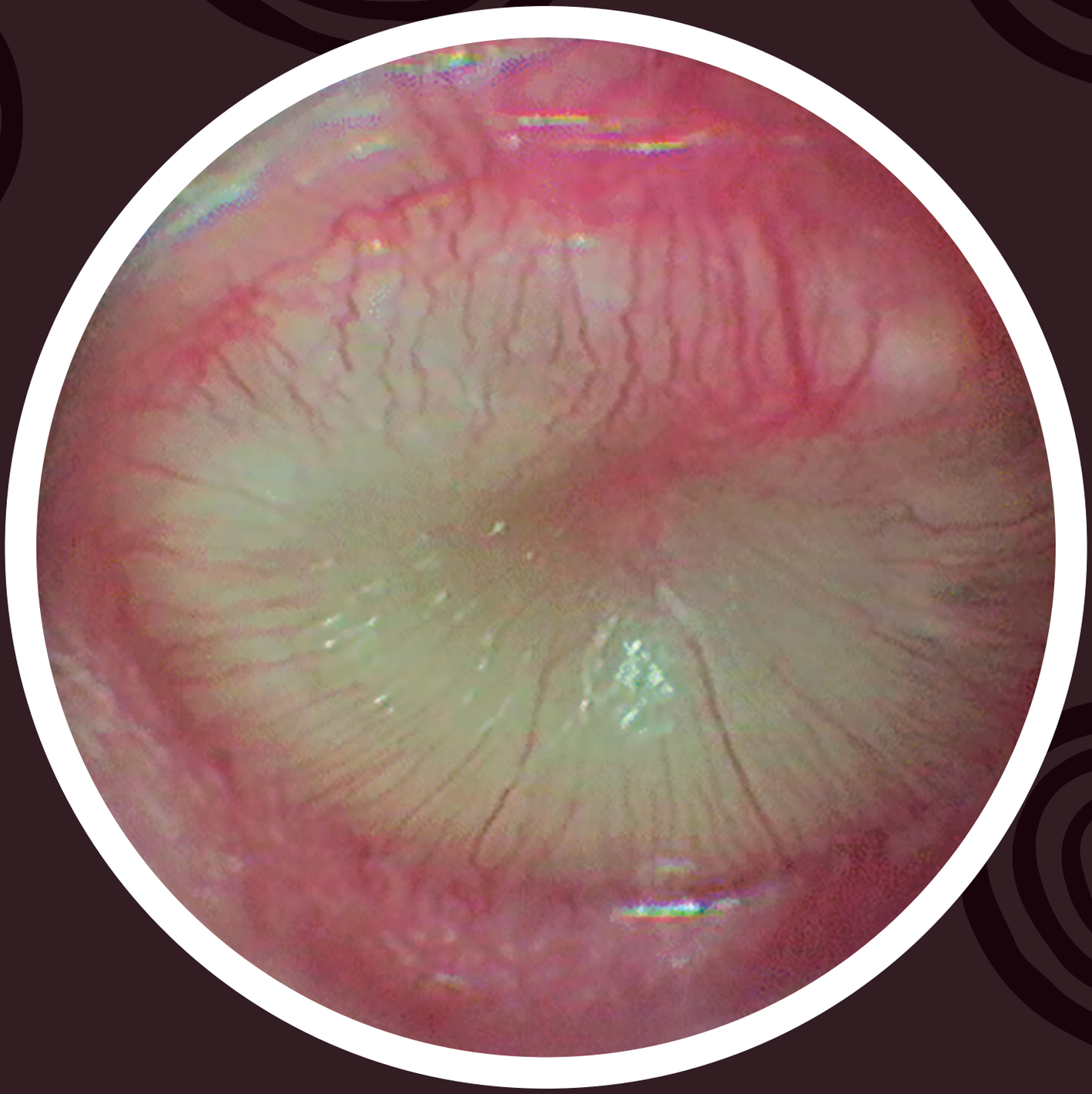
Bulging eardrum with no perforation and no pus discharging from the middle ear (may or may not be painful)

Ask: about sore ears & past ear infections (see recurrent AOMwoP).

Look: at eardrum. It will be bulging and may be red or yellow.

Do:

- If child at **low risk** of poor outcomes
  - Watchful waiting
  - Give paracetamol if in pain
  - Check after 2 to 3 days
  - If child at **high risk** of poor outcomes or if low risk and no improvement > see next page



RIGHT ACUTE OTITIS MEDIA WITHOUT PERFORATION (AOMwoP)

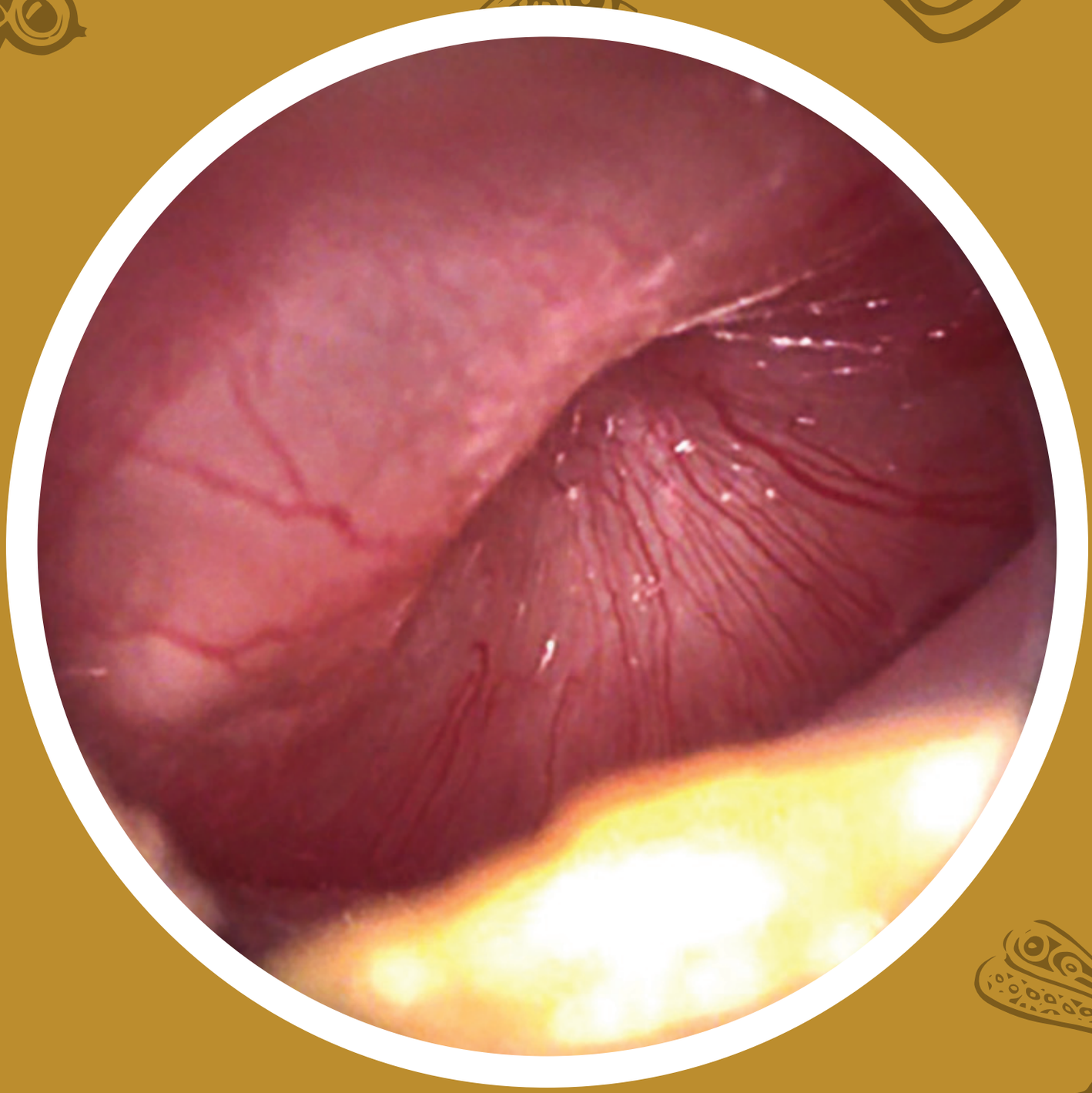
Fluid behind the eardrum without bulging or ear pain.

ACUTE OTITIS MEDIA without perforation (AOMwoP)

Bulging eardrum with no perforation and no pus discharging from the middle ear (may or may not be painful)

Do:

- If child at **high risk** of poor outcomes (OR if low risk and no improvement)
  - Give amoxycillin 50 mg/kg/day 2 to 3 times a day for 7 days OR azithromycin 30 mg/kg if adherence difficult or no refrigeration
  - Give paracetamol if in pain
  - Check after 4 to 7 days
- If no improvement increase amoxycillin to 90 mg/kg/day 2 to 3 times a day for 7 days.
- If no improvement continue amoxycillin 90 mg/kg/day 2 to 3 times a day OR start amoxycillin-clavulanate 90 mg/kg/day 2 to 3 times a day for 7 days.
- Then check again in 7 days and talk with the doctor if still no improvement



RIGHT ACUTE OTITIS MEDIA
with or without perforation
(recurrent AOMwiP or AOMwoP)

RECURRENT ACUTE OTITIS MEDIA with or without perforation (recurrent AOMwiP or AOMwoP)

Recurrent or persistent bulging eardrum with or without perforation (may or may not be painful) – 3 or more episodes in last 6 months or 4 or more episodes in last year

Treat this episode as for AOMwoP or AOMwiP

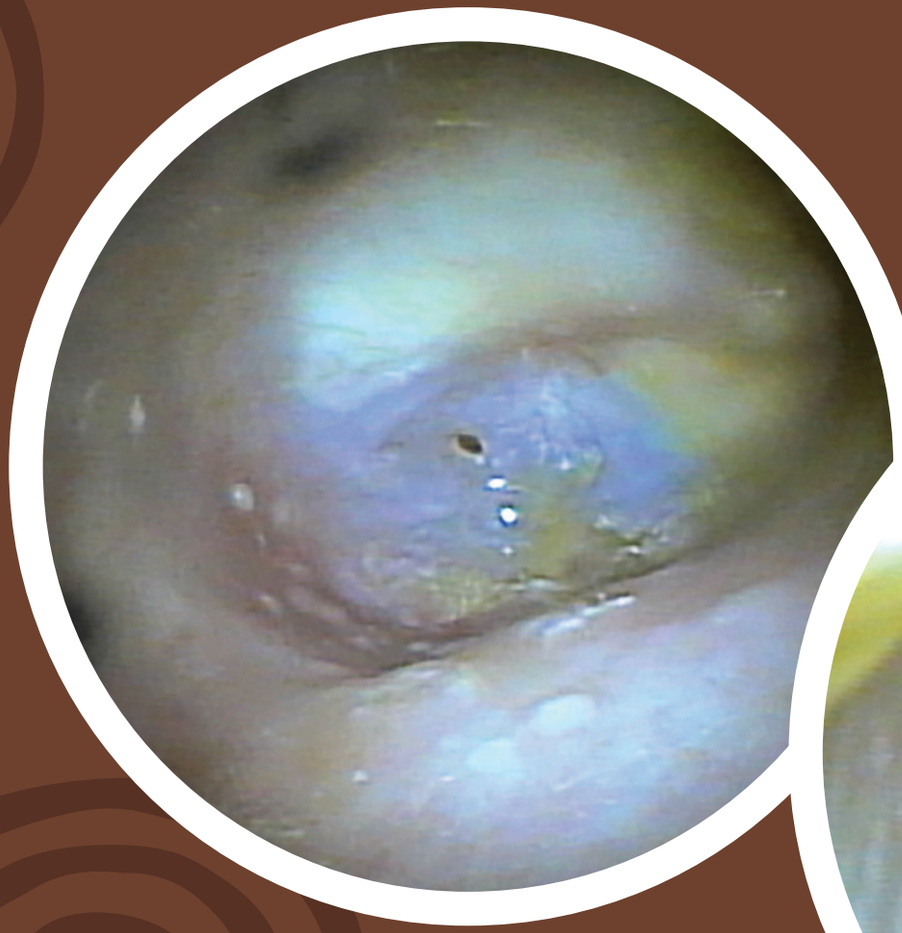
- If child at **low risk** of poor outcomes, Check monthly for

  3 months

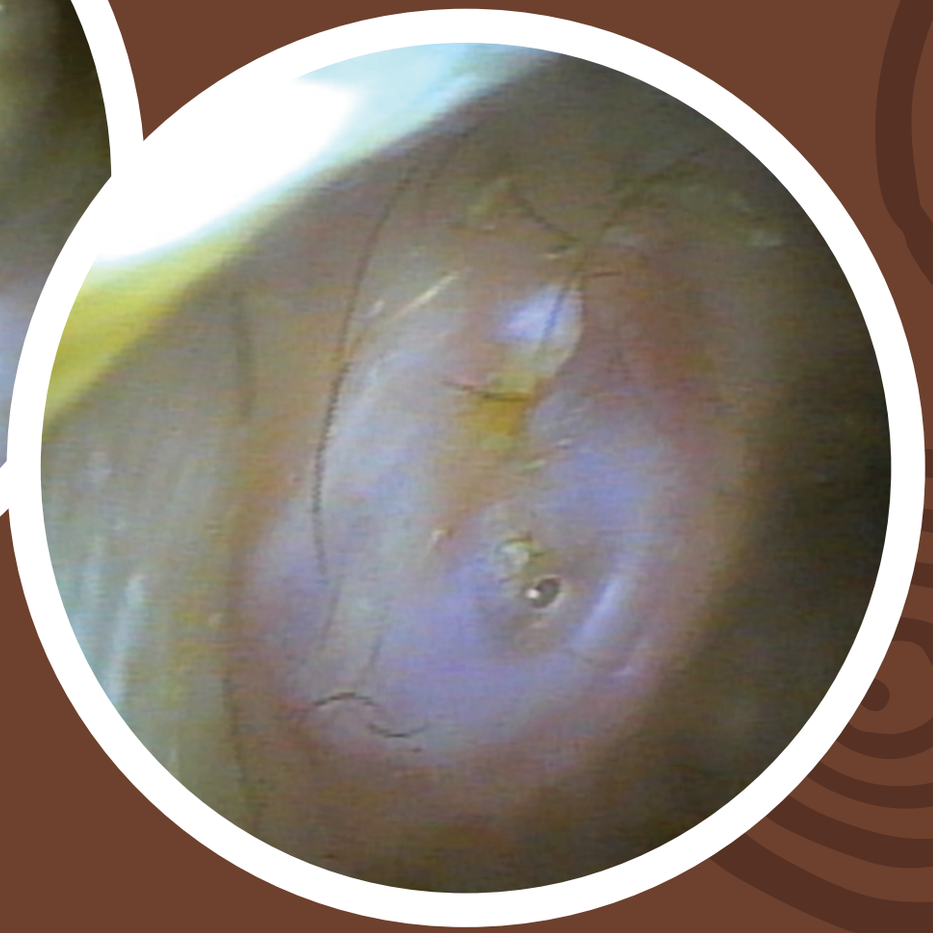
- If child at **high risk** of poor outcomes

  - Prophylactic antibiotics. Amoxycillin 25 to 50 mg/kg given 1 to 2 times a day for 3 to 6 months, Check monthly
  - If no improvement refer ENT and hearing assessments

Right AOMwiP (pus in canal)



Right AOMwiP



RIGHT AOM WITH PERFORATION (AOMwiP)

Fluid behind the eardrum with mild bulging and small inferior perforation.

ACUTE OTITIS MEDIA with perforation (AOMwiP)

AOM associated with fresh pus discharging from the middle ear. The small perforation may heal and re perforate.

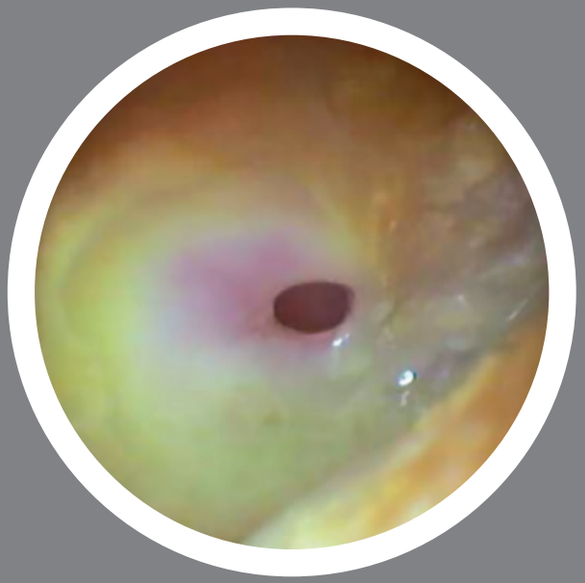
Ask: about sore ears & past ear infections.

Look: for pus in the ear canal and for a hole in the eardrum (perforation). Document amount of discharge and size and position of the perforation.

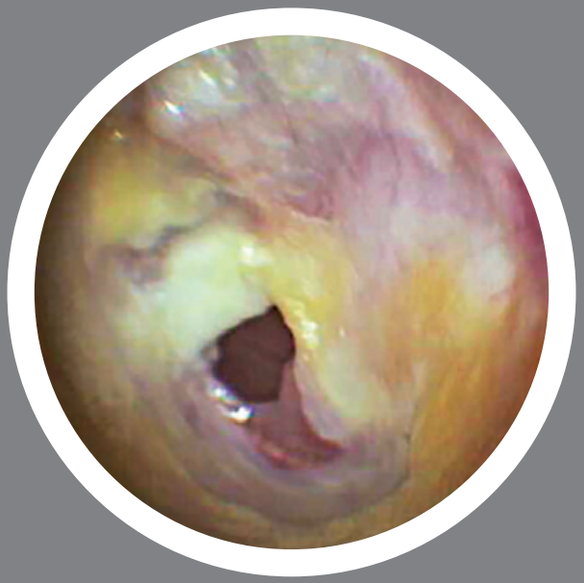
Do:

- Give amoxycillin 50-90 mg/kg/day 2 to 3 times a day for at least 2 weeks OR azithromycin 30 mg/kg if adherence difficult or no refrigeration and dry mop the ears.
- If no improvement within 7 days:
  - Give high dose amoxycillin (90 mg/kg/day) OR amoxycillin clavulanate (90mg/kg/day) 2 to 3 times a day for 7 days OR second dose of azithromycin
  - If perforation size increases, start ear drops (e.g. ciprofloxacin 2 to 5 drops 2 to 4 times/day after cleaning)

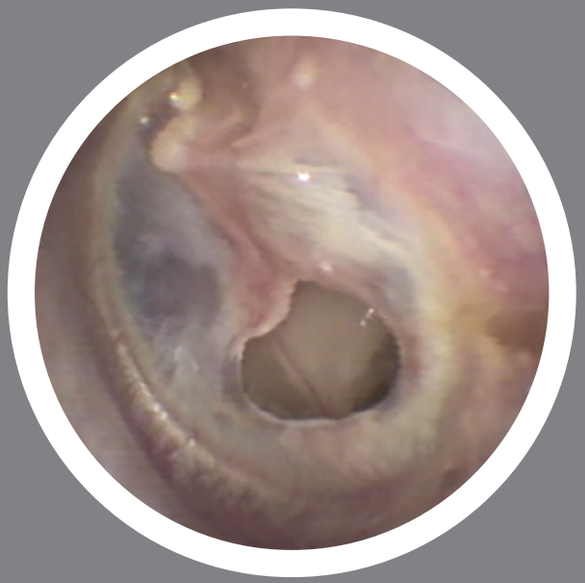
Right CSOM (10%)



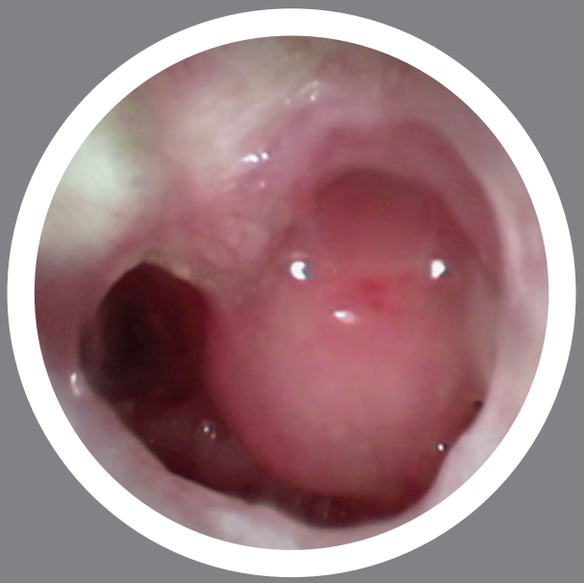
Left CSOM (30%)



Left CSOM (40%)



Left subtotal CSOM



CHRONIC SUPPURATIVE OM (CSOM)

Perforation covering at least 2% of tympanic membrane.

CHRONIC SUPPURATIVE OTITIS MEDIA (CSOM)
(also known an 'runny ears')

Discharge of pus through a perforated eardrum (>2%) for longer than 2 weeks

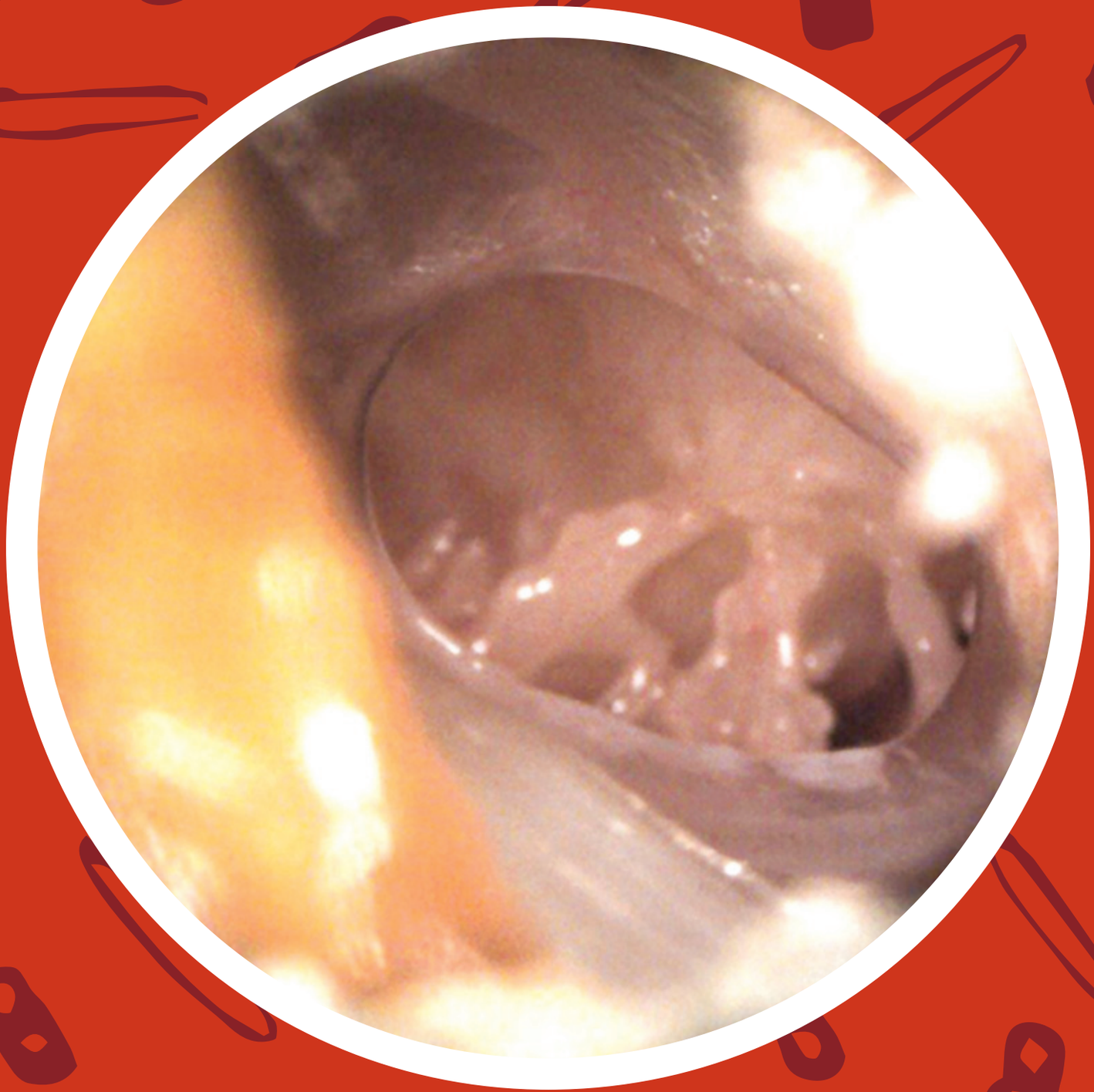
Ask: about frequency and duration of discharge; and any hearing problems

Look: document the amount of discharge and size and position of perforation.

Do:

- Ciprofloxacin eardrops (2 to 5 drops 2 to 4 times a day) after cleaning by dry mopping or syringing
- Pump the tragus to make sure the drops get into the middle ear
- Continue (don't stop) until ear has been dry >3 days
- Advise to keep ear as dry as possible

Check at least weekly.



RIGHT DRY PERFORATION

Perforation of the eardrum with no signs of pus or inflammation.

CHRONIC DRY PERFORATION

Eardrum perforation without any signs of discharge for greater than 3 months.

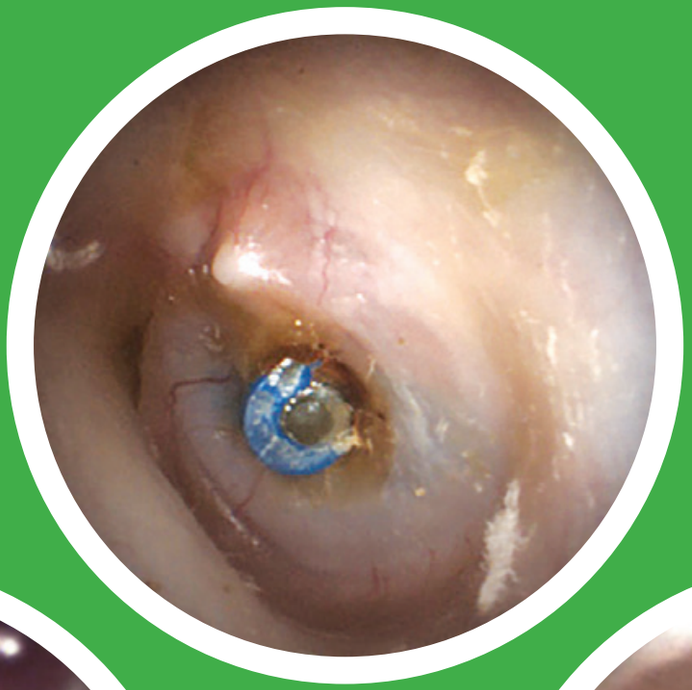
Ask: how about any hearing problems and frequency of discharge.

Look: document size of perforation and look for any discharge or inflammation.

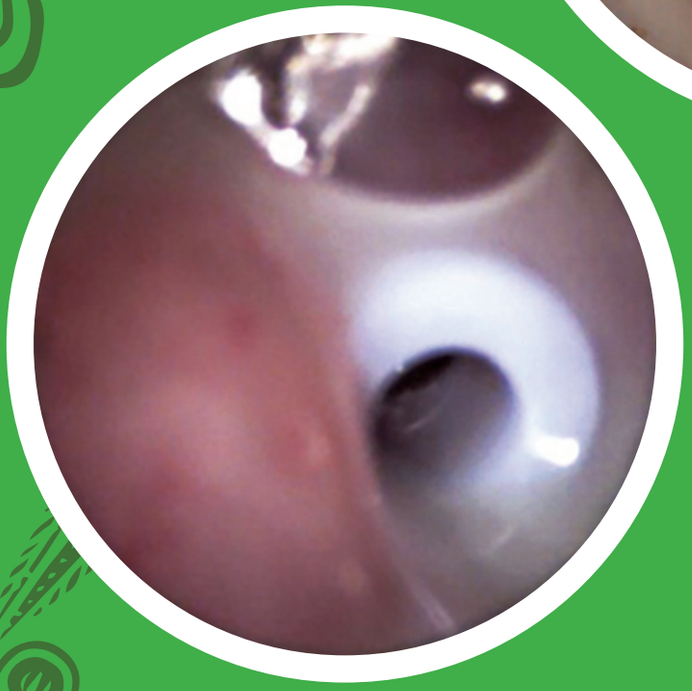
Do:

- Refer for (or Check) hearing test.
- If hearing loss >30dB or having frequent infections with discharge, refer to ENT surgeon for consideration of eardrum repair.

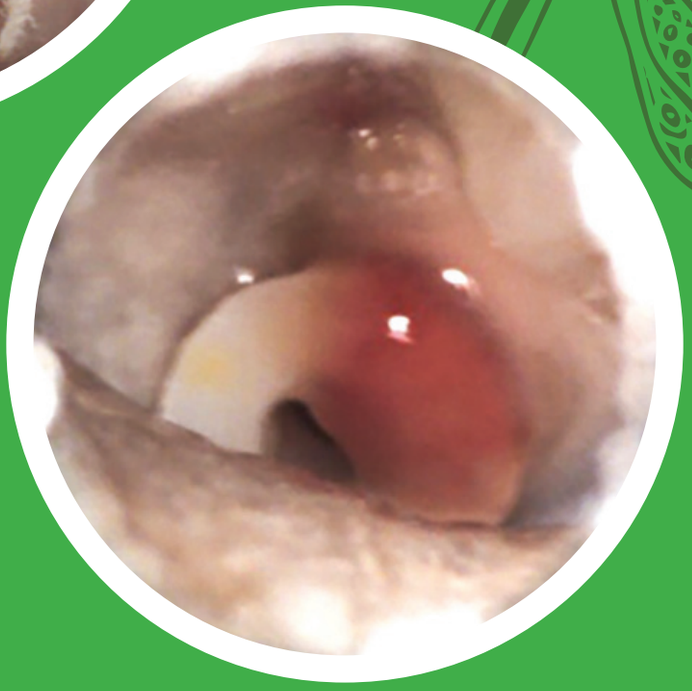
Left TTO (or blocked)



Right ear TTO



Left TTO



TYMPANOSTOMY TUBE OTTORHOEA (TTO)

Discharge of pus through a TT.

TYMPANOSTOMY TUBE OTORRHOEA

Discharge of pus through a Tympanostomy Tube

Ask: about frequency and duration of discharge. Ask if any hearing problems.

Look: document the amount of discharge

Do:

- Ciprofloxacin eardrops (2 to 5 drops 2 to 4 times a day) after cleaning by dry mopping or syringing
- Pump the tragus to make sure the drops get into the middle ear
- Continue (don't stop) until ear has been dry >3 days
- Advise to keep ear as dry as possible
- Refer to treating ENT if TTO continuous for 4 weeks or intermittent for 3 months.

Check at least weekly.

All management recommendations included in this pocket guide are based on the “Otitis Media Guidelines for Aboriginal and Torres Strait Islander children” 2020

Original pocket guide developed by Dr Gabrielle McCallum.
Pictures were kindly donated by the Ear Science Institute Australia.

menzies
school of health research