

PAEDIATRIC NURSING PRACTICE MANUAL
SECTION 3

GENERAL CARE OF THE SICK CHILD

3.10 EAR TREATMENTS

3.10.1 EAR IRRIGATION

Aim

To remove wax, foreign objects or discharge

Key points

1. Procedure must be conducted by, or supervised by a nurse who is competent in ear irrigation.¹
2. If aim is to remove wax, 2 drops of olive oil may be instilled into the ear however it may take up to 3-7 days of oil usage to soften wax.
3. 0.9% Normal Saline is usually used for ear irrigation.
4. If an antiseptic agent is required Povidone Iodine 0.5% (ie. 1mL Povidone Iodine 10% diluted with 20mL normal saline)² may be ordered. This is normally ordered by the ENT team for treatment of otitis media.

Contraindications

1. Hypersensitivity to iodine preparations.^{1, 3}
2. History of:
 - previous complications following ear irrigation in the past
 - middle ear infection in the last six weeks
 - mucous discharge in the last year
 - **ANY** form of ear surgery (apart from grommets that have extruded at least 18 months previously)
3. The patient currently:
 - has a perforation or there is a history of same
 - has a cleft palate (repaired or not)
 - shows evidence of acute otitis externa with pain and tenderness of the pinna

Equipment

Sterile irrigation solution warmed to body temperature

Irrigation syringe (catheter tip)

Kidney dish

Auriscopes with appropriate size specula

Plastic Sheeting or Towel

PROCEDURE	ADDITIONAL INFORMATION
Select a sterile solution.	Ideal solution temperature is 37°C. Hot or cold solutions may cause vertigo. ^{1, 4}

PROCEDURE	ADDITIONAL INFORMATION
Fill syringe and expel air.	
Position the child comfortably in the lateral or supine position with the head turned to one side. Older and compliant children may prefer to sit up.	For the non compliant patient refer to PNPM 1.11 Clinical Holding.
Cover patient with protective towel/plastic.	
For child and infant gently pull pinna down and back. ³ For adolescent patients gently pull pinna up and out. ³	This will straighten the auditory canal and improve visibility.
Using the auriscope, examine both ears.	Examine the least affected ear first. Do not continue with procedure if the membrane is not intact. Refer to contra indications above.
Hold the kidney dish under the ear to be irrigated.	Ask the compliant patient or an assistant to help.
With the tip of the syringe in sight, insert the syringe into the meatus of the auditory canal.	Do not occlude the meatus.
Gently instill solution into the auditory canal. Maintain a steady stream. Discontinue the procedure if you meet resistance.	Direct flow of solution along the superior/posterior aspect of the meatal wall.
Repeat until the: <ul style="list-style-type: none"> • return is clear • ear appears clear • foreign body is removed 	
Place the cooperative patient in the lateral position, affected ear down.	Maintain position for 10 minutes.
For bilateral ear irrigations repeat full procedure, as listed above.	
Document procedure. ³	Include solution and amount used, results obtained and patient response.
Request medical review of patient post procedure.	

**References:**

1. Erst A, Takakuwa K, Letner C & Weiss M. Warmed verses room temperature saline solution for ear irrigation: A randomized clinical trial [Level II]. *Annals of Emergency Medicine*. 34(3):347-50; 1999.
2. Jacobs C. Ear irrigation [Expert opinion]. *Primary Health Care*.18(7):36-39; 2008.
3. Jaya C, Job A, Mathai E & Antonisamy B. Evaluation of topical povidone-iodone in chronic suppurative otitis media [Level II]. *Arch Otolaryngol Head Neck Surg*.129(10):1098-1100.; 2003.
4. Kraszewski S. Safe and effective ear irrigation [Expert opinion]. *Nursing Standard*.22(43):45-48; 2008.