

POLICY AND PROCEDURE FOR EAR IRRIGATION

<u>Name of Surgery</u>	<u>GP responsible</u>
Criteria	Signature of professional undertaking the procedure
<p>Named staff members who have received the education and training required to undertake the procedure</p> <p>Date training undertaken</p>	
Staff members who can take direct referrals for ear irrigation	
Staff members who take referrals from the GPs	
Patients to whom this policy applies.	Adult patients (and children?) using a Propulse 11 or 111 irrigator.
Policy in place and up to date	<p>Date agreed</p> <p>Review date</p>

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CONTENTS	Page
INTRODUCTION	3
GUIDELINES FOR EAR IRRIGATION	3
<ul style="list-style-type: none">• Aim• When to irrigate• Contraindications• Specific responsibilities and accountability• Training skills• Equipment required	
EAR IRRIGATION PROCEDURE	5
<ul style="list-style-type: none">• Use of Propulse• Cleaning guidelines	
CLEANING GUIDELINES	8
APPENDIX 1- Patient Information Leaflet	9
APPENDIX 2 - Checklist/assessment form	11
APPENDIX 3 - patient information post procedure	12
REFERENCES	13
BIBLIOGRAPHY	

POLICY AND PROCEDURE FOR EAR IRRIGATION

INTRODUCTION

This policy is intended for registered nurses who are competent in carrying out safe and effective ear irrigation. It provides the practitioner/nurse with guidelines in assessment and examination in adult ear irrigation.

Ear irrigation should only be considered when other conservative methods of wax removal have failed (e.g. use of softeners). Patients requiring ear irrigation should always receive education and advice, which may reduce contributory factors and therefore the need for ear irrigation

Ear irrigation is undertaken for the purpose of removing wax from the external auditory meatus where this is thought to be causing a hearing deficit and/or discomfort, or restricts vision of the tympanic membrane preventing examination in the adult patient

Nurses performing the procedure:

- should understand the normal and abnormal anatomy and physiology of the ear and need to be aware of the complications and contraindications of ear irrigation.
- must examine the ears, check the history, discuss complications, and obtain informed consent.
- carry out the procedure as per clinic guidelines
- record all findings and treatment in the patient's records as per NMC (2008) guidance on record keeping

Nurses may accept self-referrals from patients although the protocol for self-referral must be agreed between the General Practitioners and nursing staff in individual surgeries or health centres.

Note

Metal syringes should not be used as they can create pressure up to 7.5 times atmospheric pressure ¹(Sharp et al 1990) and is considered more difficult to control compared to the electric Propulse machine (Rogers 1997)².

Therefore a Propulse 11 or 111 machine is recommended.

GUIDELINES FOR EAR IRRIGATION

AIM

To facilitate the removal of cerumen from the external auditory meatus.

WHEN TO IRRIGATE

- If you have satisfied yourself that there is wax occluding a healthy eardrum and the patient is experiencing difficulty in hearing
- If the patient has had his ears irrigated before and the history and examination reveal no current contraindications;
- If the wax is soft enough to be removed easily by irrigation.

CONTRAINDICATIONS TO EAR IRRIGATION

Irrigation should not be carried out when the patient:

- Has a perforation or there is a history of mucous discharge in the last year
- Has had a history of middle ear infection in the last 6 weeks
- Has had an untoward experience following this procedure in the past;
- Has had previous ear surgery of any kind; e.g. mastoidectomy (apart from grommets that have extruded at least 18months previously and the patient has been discharged from the ENT dept)
- Has grommets in place (if over 18m old and discharged from ENT clinic then may proceed)
- Has evidence of otitis externa
- The patient has a cleft palate (repaired or not)

Precautions

- Tinnitus - people with troublesome tinnitus may notice that when the wax is removed and their hearing improves the tinnitus may increase in severity – discuss the procedure with the patient in detail and document consent in patients' records
- Healed perforation – discuss on an individual basis – consider referral for suction removal
- Dizziness

Patients should be advised to use olive oil usually for a minimum of seven days, to soften the wax prior to irrigation. (Appendix 1)

SPECIFIC RESPONSIBILITIES AND ACCOUNTABILITY

The employer must ensure the following: -

- That all staff has access to a policy on ear care.
- Appropriate training is available to staff in order to carry out these procedures.
- All staff who carry out ear irrigation need to be competent and accountable for what they do and attend theoretical and practical training in ear care which includes recognition of ear problems.
- To have a system in place to ensure the availability of safe and appropriate equipment. Equipment needs annual maintenance checks
- Staff need to ensure the safe use of equipment provided according to the policy.

Managers have a responsibility to ensure that all the above criteria are met, through appropriate and effective strategies for the safe use of equipment and that any incidents are managed effectively according to the policy.

Areas for training needs must be highlighted and addressed. This can be undertaken through appraisals or supervision and a record of competencies kept for audit and standard purposes.

TRAINING/SKILLS

Qualified nurses undertaking this procedure must have undertaken ear irrigation training, which includes recognition of ear problems, safe ear care treatment including instruction and practical assessment on the use of the electronic irrigator and mentored by a suitably trained and qualified nurse

Nurses must be competent and confident that their skills and knowledge are maintained and up to date. (NMC Code of conduct April 2008)⁵

How often do I need to update my skills?

We would advise every two years for an invasive procedure such as irrigation. This does not have to be a formal training course but can be during clinical supervision where a colleague observes your practice and technique and feeds back to you.

EQUIPMENT REQUIRED TO UNDERTAKE EAR IRRIGATION

- Waterproof cape and disposable towel
- Otoscope with a number of different sized disposable specula and spare batteries
- Head mirror and light or mobile light;
- Propulse 2 or 3 irrigator (ensuring that it is used appropriately and serviced to the agreed standard) with disposable tips
- Access to warm water at 37⁰c
- Noots receiver – consider disposable

Examination of the ear

- Before examining the ear, take a detailed history and discuss the patients' concerns regarding their loss of hearing. Explain the procedure and take informed consent
- Ensure you and the patient are seated comfortably –you must be seated at the same level as the patient with good lighting
- Examine the pinna, outer meatus and surrounding scalp area for signs of skin lesions, previous surgery, infection, discharge and swelling. Palpate the tragus in order to identify if the patient is having pain
- Identify the largest suitable disposable speculum that will fit comfortably into the canal and attach to the otoscope
- Hold the otoscope like a pen and gently pull the pinna upwards and

outwards to straighten the EAM. Rest the small digit on the patient's head as a trigger for any unexpected head movement

- Use the light to observe the direction of the ear canal and the tympanic membrane. There is improved visualisation of the eardrum by using the left hand for the left ear and the right hand for the right ear but clinical judgement must be used to assess your own ability.
- Insert the speculum gently into the meatus to pass through the hairs at the entrance to the canal, and using gentle movements of the otoscope and the patient's head, examine all the walls of the canal

EAR IRRIGATION PROCEDURE

- Before careful physical examination of both ears, take a comprehensive history to determine if there are any contraindications as to why irrigation should not be performed
- Check whether the patient has had his/her ears irrigated before.
- Use the checklist to help identify patients who may be included or excluded .(Appendix 2)
- Informed consent has been given and documented. (NMC 2008) Best practice suggests signed/informed consent (Appendix 2)
- Explain the procedure to the patient.
- Sit the patient in a chair appropriate for the procedure with the ear to be irrigated facing the nurse
- Inspect both ears with the otoscope.
- Place the protective cape and disposable towel in position, and ask the patient to hold the receiver under the ear.
- Check your head light or mobile light is in place. Check the temperature of the water using a lotion thermometer to approximately 37°C.⁴ Remember any variation by more than a few degrees may cause the patient to feel dizzy. If this occurs, stop irrigating, and ask the patient to fix his gaze on some object for a few minutes until the dizziness passes.
- The nurse should be sitting at the same level as the patient when carrying out this procedure.

USE OF A PROPULSE 11 or 111 IRRIGATOR

- Fill the reservoir of the Propulse irrigator with warm water to 37°C. Set the pressure to minimum.
- Connect disposable jet tip applicator to tubing of machine with firm push/twist action. Push until click is felt.
- Direct the jet tip into the reservoir and switch on the machine for 10 - 20 seconds in order to circulate to water through the system and eliminate any trapped air or cold water. This also enables the patient to accept the noise the machine makes.
- Gently pull the pinna upwards and outwards to straighten the meatus.
- Place the tip of the nozzle into the external auditory meatus entrance. Nothing should be inserted into the ear further than the part that can be seen from the

outside. Warn the patient that you are about to start and that if they have any symptoms of pain, dizziness or nausea, to inform you. Switch the machine on (using either foot or hand control). Direct the stream of water onto the posterior wall of the canal. (11 o'clock in the right ear and 1 o'clock in the left ear). Increase the pressure switch as determined by the aural condition. It is advisable that a maximum of 2 reservoirs of water is used in any one irrigation procedure.

- If you have not managed to remove the wax within 5minutes of irrigation, it may be worthwhile moving on to the other ear, as the introduction of water via the irrigating procedure will soften the wax and you can retry irrigation after about 15minutes
- Periodically inspect the meatus with the auriscope and inspect the solution running into the receiver.
- After removal of the wax, ask the patient to dry mop the excess water from the meatus. Dry mop excess water from meatus under direct vision because stagnation of water and any abrasion of the skin during the procedure may predispose the otitis externa to infection.
- Examine ear, both meatus and tympanic membrane, and refer to doctor if there is severe inflammation or trauma. Record all findings and treatment in the patients' notes as per NMC guidance on record keeping
- Give advice regarding ear care and patient information sheet for post procedure.(Appendix 3)

NB Irrigation should NEVER cause pain. If the patient complains of pain – STOP IMMEDIATELY

PROPULSE CLEANING GUIDELINES (an example) – please refer to manufacturer’s guidance on individual propulse irrigators

At the beginning of the day or ear irrigation session:

1. Turn off electricity supply
2. Place one Precept cleaning tablet into the reservoir and fill with warm water to the 500ml mark.
3. Once Precept tablet has dissolved, run the Propulse for a few seconds to allow the solution to fill the pump and flexible tubing.
4. Leave to stand for 10 minutes.
5. Ensure that the cleaning and disinfection solution is not left in the unit for more than 10 minutes.
6. Flush the unit through with water and dry thoroughly.
7. **Always follow manufacturers’ guidelines**
8. Annual servicing of the irrigator is recommended

Cleaning of Noots ear tank

1. Clean with detergent solution
2. Rinse under hot water.
3. Dry thoroughly

Earwax is properly known as cerumen.

Cerumen is a normal secretion designed to trap debris, therefore protecting the lining of the ear. It is also slightly acidic and protects the ear from infection. It is continuously secreted in the outer regions of the auditory canal by the ceruminous glands. The wax is gradually moved towards the entrance of the auditory canal by the self-cleaning mechanism of the skin and by the action of muscles used in chewing and talking. The colour, consistency and amount of earwax produced by individuals vary widely. Wax may appear to be dry and flaky, or crumbly consistency, honey coloured or dark brown and very hard when it may become quite firmly attached to the underlying skin.

However, some people experience problems, and ear irrigation is one way of removing excessive amounts of earwax.

Some of the common problems are: -

- Narrow ear canals. Dusty or dirty environment, people who work in areas where there is a lot of dust or dirt in the air sometimes finds that this combines with the cerumen in the ear to form a plug.
- Cleaning attempts. Using cotton buds, matchsticks and hair clips to try to clean out the ear canals is one of the most common causes of impacted wax. It causes the wax to be forced down the canal and form a hard dry plug against the eardrum. Matchsticks and hair clips can inflict considerable damage to the skin lining of the canal.
- Earplugs. The use of earplugs, often mandatory in some occupations, can have a similar effect to cotton buds.
- Hearing Aid moulds. They can interfere with the natural ability to shed dead skin and wax, and cause debris to build up in the canal.
- Habit. Some people become accustomed to attending regularly for ear irrigation, believing it is necessary to prevent them experiencing hearing loss.
- Age. Older people may have drier wax, and older men often develop more hairy ears.

Prior to having your ears irrigated you will be required to instil drops of olive oil twice a day for seven days. This will soften the wax in preparation for syringing. See below instructions on how eardrops should be instilled. Do not put cotton wool into your ears, as this will absorb the oil.

The recommendation is that olive oil should be used for this procedure.

The only reason for carrying out ear irrigation is when hearing is reduced due to wax impacted on the eardrum.

Regular or routine irrigation is not recommended.

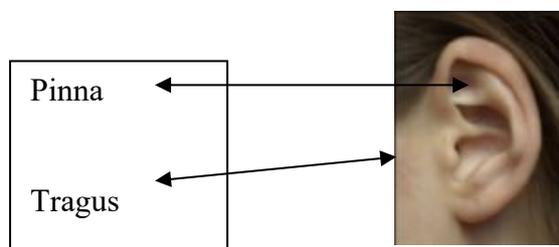
THE USE OF COTTON WOOL BUDS, MATCHSTICKS, HAIRPINS, PAPER CLIPS ETC TO REMOVE WAX IS NOT ADVISED

INSTILLATION OF EAR DROPS

In preparation for ear irrigation and to encourage normal wax expulsion from the outer ear

When using olive oil drops

- 1 Lie down on your side with the affected ear uppermost
- 2 Drop 2 or 3 drops of oil (at room temperature) into the ear canal and massage the tragus, just in front of the ear and pull the pinna backwards and upwards. This enables the oil to run down the ear canal.



- 3 Stay lying down for 5 minutes and then wipe away any excess oil.
- 4 Do not leave cotton wool at the entrance to the ear
- 5 Repeat the procedure with the opposite ear if necessary.
- 6 Prior to irrigation, insert the drops twice a day for at least 7 days

CHECKLIST / CONSENT FORM

Appendix 2

NameD.O.B.....

<i>Past history</i>	Rt ear Yes / No	comments	Left Ear Yes / No	comments
Previous problem following ear irrigation				
Recent ear perforation				
Previous ear surgery e.g. mastoidectomy				
Discharge from the ear				
Current or recent ear infection				
Catarrh or cold				
Ear pain				
Grommets				
Cleft palate				
Foreign body in situ				
Use of olive oil appropriately for a minimum of 7 days				

The nurse has asked questions related to the above conditions. She/he has explained the proposed treatment, and given me information on ear care. I understand that ear irrigation carries a rare risk of perforation to the eardrum.

I understand and consent to the proposed treatment.

Signature..... Date

Patient advice post ear irrigation

Appendix 3

- The ear canal may be vulnerable to an ear infection after irrigation. This is caused by removal of all the wax, which has inherent properties to protect the ear canal
- Until the ear produces more wax to protect the canal keep the ear(s) that have been irrigated dry from entry of water for a minimum of 4 or 5 days after the procedure
- To keep the ears dry when you are washing your hair, showering, bathing or swimming, insert ear plugs or cotton wool coated in petroleum jelly into the outside of the ear canal (s) to act as a protective seal
- In the unlikely event that you develop pain, dizziness, reduced hearing or discharge from the ear after the procedure, consult with your nurse/doctor⁷
- It may be helpful to instil olive oil 2 – 3 times a week and wear ear plugs when in water for people who have a recurrent build up of wax
- Ear irrigation DOES NOT CAUSE A BUILD UP OF WAX
- If wax is removed due to the presenting complaint of hearing loss, ascertain whether good hearing is restored after treatment or if the patient would benefit from a formal assessment by the audiologist.
- REMEMBER ear wax protects the ear; poking will only push wax deeper in the canal and cause problems; the ear is self-cleaning and does not need poking with flannels and direct streams from the shower head or cotton buds!

REFERENCES

¹Sharp et al 1990 ear wax removal: a survey of current practice. British medical Journal 90(301):1251-1252(Price, 1997).

²Rogers R1997How safe is your ear syringing? Community nurse June 28-29

³Thurgood K1995. ear wax removal: a survey of current practice. British Journal of Nursing 12:682-686

⁴ Primary care ear centre The Rotherham NHS Foundation Trust March 2011

⁵NMC Code of conduct April 2008

⁶NMC guidance on record keeping July 2007

⁷www.ENTnursing.com

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