EAR, NOSE AND THROAT: POST OPERATIVE MANAGEMENT AND CARE

PRACTICE GUIDELINE ©

DOCUMENT SUMMARY/KEY POINTS

- The purpose of this document is to outline the indications and post-operative care for Ear Nose and Throat (ENT) surgery, along with a guide to management of possible complications.
- The guidelines include instructions for care both during the hospital stay and education needs of parents prior to discharge.
- The document is a guide only and does not take away the need for clinical judgement in individual cases.

CHANGE SUMMARY

- New SCHN Practice Guideline; replaces CHW version
- Changes to routine post-op observations at CHW

READ ACKNOWLEDGEMENT

- All clinical staff who provide clinical care to this patient group should read and acknowledge they understand the contents of this document.

Approved by:	SCHN Policy, Procedure and Guideline Committee	
Date effective:	1st December 2016	**Review Period:** 3 years
Team leader	ENT Speciality Nurse	**Area/Dept:** Surgery

Date of Publishing: 6 January 2017 11:39 AM Date of Printing:

TABLE OF CONTENTS

1 Scope / Introduction

The purpose of this document is to outline the indications and post-operative care for the most common Ear Nose and Throat (ENT) surgery performed at The Children's Hospital at Westmead (CHW), and Sydney Children's Hospital (SCH), along with a guide to management of possible complications.

The guidelines include instructions for care both during the hospital stay and education needs of parents prior to discharge.

The document is a guide only and does not take away the need for clinical judgement in individual cases.

2 Post Operative Pain Management and Fluids

Hydration

- Intravenous (IV) therapy as ordered - an Intravenous Cannula should remain insitu until the child tolerates oral fluids.
- Regrade from clear fluids to light diet as tolerated.
- Most children will return to the ward with a capped intravenous cannula. This will remain insitu until the following morning for use in the case of children who are unable to tolerate oral fluids or who have bleeding post operatively.

Pain Management

- Analgesia PRN as ordered - Paracetamol 4 - 6 hourly is recommended. Pain should be minimal. (Refer to Pain Management Practice Guidelines) Aspirin is not to be used because of its anticoagulant properties. Ibuprofen is to be used with caution.
- Pain is uncommon after ear surgery but discomfort is common. Stronger analgesic should not be given until patient is reassessed by ENT Registrar or Consultant.
- Tonsillectomy and Adenotonsillectomy patients will have pain post operatively; regular analgesia is required as ordered.

3 Ear Surgery

Cochlear Implant

Cochlear implant surgery is performed after extensive testing and assessment of the child's hearing. Usually the child will have undergone auditory brain stem testing some weeks prior to the surgery. Only total or nearly totally deaf children are eligible. The parents will have been fully informed of the procedure, possible complications and alternative methods.

Post-operative Monitoring and Observations including possible complications

- Temperature, pulse, respiration (TPR) and blood pressure (BP) on return to the ward and hourly pulse and respiration for four hours. Thereafter, 4 hourly TPR and 8 hourly BP if satisfactory.
- Observe for any signs of facial weakness and inform medical officer immediately.
- Mark any ooze/bleeding and report to the medical officer. The head bandage should only be removed on the registrar or Visiting Medical Officer's (VMO) instructions. Reinforcement and replacement of the bandage may be necessary if patient dislodges or removes bandage.
- Report two or more vomits immediately to the medical officer, because of proximity of surgery to cranial nerves.
- All children are given antibiotic cover.

Discharge Criteria and Special Instructions for Parents

- If surgery is uncomplicated the child is usually discharged the day after surgery.
- The ENT team removes the bandage and dressings.
- A light bandage can be applied to protect wound in a young active child.
- The stitches are absorbable so no removal is needed.
- The child is to complete the course of antibiotics.
- A follow up appointment needs to be made at the Sydney Cochlear Implant Centre (CHW) or the Shepherd Centre (SCH) one week post operatively.
- If the child is of school age, they can return to school after this follow-up appointment.
- Advise parents to restrict the child’s physical activity for one week. Any friends who have upper respiratory tract infections should be discouraged from visiting.

Mastoidectomy

Mastoidectomy is performed to remove infection; drain accumulated pus; prevent further bone damage and the formation of a cholesteatoma; and to create access to neural structures. The surgery is performed through a post-auricular incision and drilling of the mastoid bone.

Indications for Surgery:

- Chronic otitis media
- Chronic mastoiditis
- Cholesteatoma
- Acute mastoiditis with complication

Post-operative Monitoring and Observations including possible complications

- Temperature, pulse and respirations (TPR)and BP on return to ward. Hourly pulse/respirations for 4 hours; thereafter 4 hourly TPR and 8 hourly BP if satisfactory.
- Report excessive swelling, ooze, pain, unusual rise in temperature, facial weakness or neck stiffness immediately to Medical Officer (MO).
- Record type and amount of vomitus and report excessive vomiting to MO.
- Leave dressings in place until reviewed by ENT team. Dressings in ear canal are not touched. Head bandage usually removed next day and may need replacing.
- Slight imbalance can occur after ear surgery but giddiness is a concern and must be reported immediately to ENT team.

Discharge Criteria and Special Instructions for Parents

- Instruct parents on suitable analgesia - Paracetamol PRN is recommended. Aspirin and should be avoided due to anticoagulant properties. Ibuprofen is not recommended for this reason and should be used with caution..
- Keep water off ear until advised at follow up.
- Explain possibility of earache for a few days after surgery. If earache is prolonged and there is any swelling/redness and temperature they should contact their Medical Officer.
- Advise parents on need to observe suture line for redness or swelling.
- Ensure parents have follow-up appointment.
- Packing will be removed at follow-up appointment, if packing falls out then contact medical officer.
- Parents should limit activity for the child as instructed by ENT team
- School age children may return to school as indicated by doctor at follow-up appointment.

Tympanoplasty

Tympanoplasty means reconstructive operation on the middle ear which includes the tympanic membrane (ear drum) and the middle ear bones (ossicles). If only the ear drum is repaired (to close a perforation) the procedure is a Type 1 Tympanoplasty, which is called a myringoplasty.

Post-Operative Monitoring and Observations including possible complications

- Temperature, pulse and respirations (TPR) and BP on return to ward. Hourly pulse/respirations for 4 hours; thereafter 4 hourly TPR and 8 hourly BP if satisfactory.
- Report excessive swelling, ooze, pain, unusual rise in temperature immediately to Medical Officer (MO).
- Record type and amount of vomitus and report excessive vomiting to MO.
- Dressing and ear packing (if insitu) to remain intact for 24 hours until reviewed by ENT team Replace operative dressing with dry dressing if necessary.

Special Instructions for Parents on Discharge

- Instruct parents on suitable analgesia - Paracetamol PRN is recommended. STRESS that Aspirin and ibuprofen are to be avoided.
- Keep the ear dry until follow up appointment
- Explain possibility of earache for a few days after surgery. If earache is prolonged and there is any swelling/redness and temperature they should contact their Medical Officer.
- Advise parents on need to observe suture line if present for redness or swelling.
- Ensure parents have follow-up appointment.
- Packing will be removed at follow-up appointment, if packing falls out then contact medical officer.
- Parents should limit activity for the child as instructed by ENT team
- School age children may return to school as indicated by doctor at follow-up appointment.

Myringotomy and Insertion of Ventilation Tubes

A myringotomy is a surgical opening made in the tympanic membrane. It may be performed on its own to allow drainage of fluid from the middle ear but is more often combined with insertion of a 'grommet' which is a small tube to keep the ventilation hole from closing too quickly.

The procedure is usually performed as a day stay admission.

Indications for Surgery

- Otitis media with effusion (glue ear)
- Recurrent middle ear infections

Post-Operative Monitoring and Observations including possible complications

- If Middleton Day Surgery patient, length of stay postoperatively is 2 hours.
- Please refer to the Post Operative Care and Discharge in the Middleton Day Surgery Unit Practice Guideline for monitoring and observations performed in recovery.
- Check ears for any discharge or bleeding. Notify Medical Officer if concerned.

Special Instructions for Parents on Discharge

- Keep water from ears for 2 weeks. Then may shower or wash hair in shower without special precautions.
- No bath water or swimming pool water to enter ears at any time while grommets are in place.
- Follow up appointment 6-8 weeks with hearing test prior (CHW) or as stipulated on post-op order (SCH).

Ear – Parent Fact Sheets

All parent and carer fact sheets are available on the SCHN Internet page.

Glue Ear and Grommets

Otitis Media (Middle ear infection)

Can your child hear?

The Inheritance of Deafness

Deaf in One Ear: Babies and Pre-School Children

Ear Problems in Children

How to instil Ear Drops:

- refer to Appendix 1: Instillation of Ear Drops

4 Nose Surgery

Functional Endoscopy Sinus Surgery (F.E.S.S.)

Functional Endoscopy Sinus Surgery is performed to improve the normal drainage of the sinuses. This is very delicate surgery of the sinuses that are close to the orbit (eye cavity) and the bones separating the nasal cavity from the intracranial cavity.

A CT Scan of the sinuses must be available with the patient or on the Hospital's Medical Imaging system.

Post-Operative Monitoring and Observations including possible complications

- Temperature, pulse, respirations (TPR) and blood pressure to be taken on return to ward then hourly pulse and respirations for 4 hours. This is followed by 4 hourly TPR and 8 hourly BP if stable.
- **Constant observation for 24 hours for the following problems:**
  - **Proptosis:** the eye appears to protrude out of the orbital cavity
  - **Periorbital Haemorrhage:** bruising of tissues around the eyes.
  - **Subconjunctival Haemorrhage:** bleeding into the white of the eyes.
  - **Subcutaneous Emphysema**: the skin around the eye will feel as if there are rice bubbles under it.
  - **Restricted ocular movement**: laterally, medially, up and down.
  - **Pupils non-reactive** in response to light.
  - **Vision blurred** if there is pressure on the optic nerve.
- A small amount of bloodstained mucous is normal.
- If there is packing in the nostrils then patient is not to try to blow nose. Packing will usually be removed the next morning by the ENT team.
- If no packing then the child may blow nose gently.
- Nasal saline spray is used frequently to clean and clear the nose
- Drixine, or similar decongestant nasal spray, is often prescribed for up to 5 days after surgery, used 2-3 times daily.

Special instructions on Discharge

- The child is normally discharged the day after surgery
- They must complete their antibiotics at home.
- Child may gently blow nose, one nostril at a time. Do not block both nostrils at the same time.
- Blood-stained mucous may continue for some weeks after surgery.

- Parents are taught how to administer nasal sprays.
- Paracetamol may be given for pain relief.
- If any bleeding, pain in the eye or swelling and bruising in the region of the eye should occur, then the child must be brought back to the hospital to be seen by the ENT registrar.
- If the child develops a fever, or feels unwell, in office hours for CHW contact ENT Clinical Nurse Consultant, or out of hours either the GP or Emergency Department, depending on severity. There is a risk of infection spreading internally from the sinuses. This could become serious
- Follow up 1-2 weeks after surgery
- The child should be kept as quiet as possible and off school until reviewed.

How to instil nose drops:

- Refer to Appendix 2: Instillation of Nasal Drops

5 Throat Surgery

Tonsillectomy with or without adenoidectomy

- **Tonsils:** Are two clumps of lymphoid tissue located on both sides of the throat.
- **Adenoids:** Are a single clump of lymphoid tissue located on the back wall of the throat (or back of the nose) just above the uvula.

Indications for Surgery

- Enlargement causing Obstructive Sleep Apnoea and snoring
- Chronic and recurrent tonsillitis.
- "Chronic cryptic tonsillitis" or white debris in the tonsils, causing bad breath.
- Unusual enlargement or appearance (possible tumour).

Admission

Day of surgery admission - CHW

Some children will be admitted through the Pre-admission Testing Service (PATS), usually during the week before surgery. No routine blood tests are required pre-operatively.

Day Surgery

Some CHW patients will be suitable for Adenotonsillectomy as a Day Surgery Procedure in Middleton. The following selection criteria must be met for admission to the Day Surgery Unit:

- Be between the ages of 5 and 15 years.
- Weighs more than 20 kilograms
- Lives within a 30-minute drive from a hospital with 24hr ENT coverage.
- Have no predisposing family history that could result in possible post-operative complications i.e. malignant hyperthermia risk, bleeding disorders.
- Have no predisposing medical conditions liable to cause post-operative complications or the need to admit i.e. sleep apnoea.
- There should be no communication difficulties with the family.
- It is preferable that these children attend the PATS clinic the preceding week and need to have a recommendation for Day Surgery Admission form (MR2a-DS) completed, including the consent by the surgeon or surgical registrar

Post Operative Management and Observations

For ward placement for patients with a history of Obstructive Sleep Apnoea please refer to OSA following Adenotonsillectomy: Monitoring of patients Practice Guideline

- Close monitoring for bleeding
- Temperature, pulse and respiration (TPR) and BP on return to the ward; thereafter hourly hourly pulse and respirations. Continuous saturations monitor from arrival to the ward.

Fourth hourly temperature and 8 hourly BP unless indicated for 24 hours post operatively.

- Report and document any abnormal observations to the Medical Officer.
- Nurse in a position which is comfortable for the child, as long as their airway and breathing is maintained – this is usually on the side or abdomen
- Report any excessive swallowing or continuing bleeding from mouth or nose.
- Record all vomiting and describe contents e.g. old or new blood
- Discourage coughing, clearing of throat and blowing of nose as this may cause operative area to bleed.

Day Surgery – CHW only

- If Middleton Day Surgery patient, the child must be observed for four to six hours post-surgery for Tonsillectomy to ensure the high risk period of post-operative bleeding has elapsed.
- Please refer to Post Operative Care and Discharge in the Middleton Day Surgery Unit Practice Guideline for monitoring and observations performed in recovery.
- ½ hourly temperature, pulse, respirations, blood pressures and oxygen saturations for 4 hours then hourly pulse and respirations for 2 hours.

Discharge Criteria for Day Surgery Patients

- Please also refer to Post Operative Care and Discharge in the Middleton Day Surgery Unit Practice Guideline for Nurse Initiated Discharge Criteria for day surgery patients.
- Patient must have tolerated oral fluids and be swallowing comfortably prior to discharge.
- Nil bleeding (macroscopic) from the tonsillectomy wound site. Observe for frequent swallowing or fresh blood in vomitus. Torch view of the back of the throat will be necessary.
- Ensure patient has had appropriate pain relief. One dose of oral oxycodone to be given in recovery. Anaesthetist to supply discharge oxycodone and dispensing instructions.
- Must have received 10-20ml/kg intra-operatively of IV fluids to prevent dehydration and nausea. Minimal vomiting prior to discharge.
- ENT team review required prior to discharge.

Complications and their management

Haemorrhage

- If the child has a significant post-operative bleed or becomes tachycardic, pale and sweaty activate the rapid response team as per the CERS protocol (SCH CERS Protocol) (CHW CERS Protocol)
- All vomitus or blood-stained sheets should be saved for inspection.
- Pulse and respirations should be taken every 15 minutes and blood pressure 1/2 hourly until the child is reviewed and stable.

Airway Obstruction

Signs: restlessness/agitation, stridor/drooling, tachypnoea, respiratory distress.

- Sit child up at 45° angle
- Administer oxygen and monitor oxygen saturation
- Call Rapid Response team as per the CERS protocol
- Monitor temperature regularly. Notify RMO if above 38° C/ call for clinical review.
- Administer paracetamol as ordered.
- Administer antibiotics if ordered.
- Persistent vomiting should be treated with anti-emetics
- Observe for any bleeding after vomits.

Discharge Instructions for Parents

- Instruct parents on suitable analgesia - Paracetamol every 6 hours is recommended for the first 4 – 5 days. Stress that Aspirin is to be avoided because of the risk of bleeding, parents should only give Ibuprofen if they are directed by their surgeon.Parents may be given a prescription for stronger pain medication e.g. Oxycodone. Painstop and Codeine are not to be used post operatively
- Encourage fluid intake to promote healing
- Explain the possibility of earache for a couple of days- this occurs in approximately 50% of patients and is due to referred pain from the tonsillar bed.
- Inform parents that blood tinged mucus is normal for 5-7 days.
- Discourage coughing and blowing of nose for at least three days.
- Explain the possibility of secondary bleeding and stress the need to seek urgent attention should bleeding occur, to both contact the hospital emergency department and return to hospital
- Antibiotics may be given post-operatively.
- Advise parents on the need to restrict their child's activity and monitor temperature. In the case of persistent high temperature see local doctor.
- School children return to school after 2 weeks

- Written discharge instructions supplied to parents prior to discharge.

Follow up – CHW

Follow up will be with a phone call from the ENT Nurse in approximately 2-4 weeks after surgery.

- Follow-up phone call attended within 24 hours (for day stay patients only).

Follow up – SCH

- A follow up appointment is either made at the ENT clinic or in the ENT consultant's private rooms as per discharge instructions

Tonsillectomy Parent Fact sheet

https://www.schn.health.nsw.gov.au/parents-and-carers/fact-sheets/tonsillectomy

Adenoidectomy

Most children are admitted as day stay patients for routine adenoidectomy and discharged after four hours if satisfactory. Any child who has persistent vomiting or bleeding is admitted overnight in a general ward for observation.

Indications for Surgery

- Enlargement causing Obstructive Sleep Apnoea and snoring.

Post Operative Monitoring and Observations.

- Close monitoring for bleeding
- Temperature, pulse and respiration (TPR) and BP on return to the ward; thereafter hourly pulse, respirations and continuous saturations for the four hours up until discharge. Report and document any abnormal observations to the Medical Officer.
- Nurse in a position which is comfortable for the child, as long as their airway and breathing is maintained – this is usually on the side or abdomen
- Report any excessive swallowing or continuing bleeding from mouth or nose.
- Record all vomiting and describe contents e.g. old or new blood
- Discourage coughing, clearing of throat and blowing of nose as this may cause operative area to bleed.

Day Surgery - CHW

- If Middleton Day Surgery patient, length of stay postoperatively is 4 hours.
- Please refer to Post Operative Care and Discharge in the Middleton Day Surgery Unit Practice Guideline for monitoring and observations performed in recovery.
- hourly temperature, pulse, respirations, blood pressures and oxygen saturations for 2 hours then hourly pulse and respirations for 2 hours.
- Surgical/Anaesthetic review required prior to discharge.

Discharge Criteria for Day Surgery Patients

- Please also refer to Post Operative Care and Discharge in the Middleton Day Surgery Unit Practice Guideline for Nurse Initiated Discharge Criteria for CHW day surgery patients and to Discharging Day Only Surgical Patients – C1South for SCH patients
- The child must be observed for four hours post surgery to ensure the high risk period of post-operative bleeding has elapsed.
- Must have received 10-20ml/kg intra-operatively of IV fluids to prevent dehydration and nausea. Minimal vomiting prior to discharge.
- Patient must have tolerated oral fluids and be swallowing comfortably prior to discharge.
- Nil bleeding Observe for frequent swallowing or fresh blood in vomitus. Torch view of the back of the throat will be necessary.
- Ensure patient has had appropriate pain relief. One dose of oral oxycodone may be given in recovery.

ENT team review prior to discharge.

Complications and their management

Haemorrhage

- If the child has a significant post-operative bleed or become tachycardic, pale and sweaty call a Clinical Review or activate the Rapid Response Team as per the CERS protocol
- All vomitus or blood-stained sheets should be saved for inspection.
- Pulse and respirations should be taken every 15 minutes and blood pressure 1/2 hourly until the child is reviewed and stable.

Airway Obstruction

Signs: restlessness/agitation, stridor/drooling, tachypnoea, respiratory distress.

- Sit child up at 45° angle
- Administer oxygen and monitor oxygen saturation
- Notify ENT or Paediatric Registrar immediately
- Monitor temperature regularly. Call a Clinical Review as per the CERS protoicol if above 38° C.
- Administer paracetamol as ordered.
- Administer antibiotics if ordered.
- Persistent vomiting should be treated with anti-emetics
- Observe for any bleeding after vomits.

Discharge Instructions for Parents

- Adenoidectomy is a relatively pain-free procedure. A mild to moderate sore throat can be expected for the first 24 hours
- Analgesia after that is rarely needed
- Paracetamol should be sufficient
- Activity should be restricted for 5 days, after which school children may go back to school.
- Any signs of bleeding after leaving hospital patient should return to the hospital Emergency Department for review

Adenoidectomy Parent Fact sheet

https://www.schn.health.nsw.gov.au/parents-and-carers/fact-sheets/adenoidectomy

Post tonsillectomy bleed

This occurs in 1-2% of children. It occurs between 7-10 days but can occur any time up to 2 weeks. Most children will be admitted for 24 – 48 hours observation and need no surgical intervention. The decision on surgical intervention will be made by the ENT registrar and consultant on call.

On arrival in the Emergency Department the child will need to be cannulated and a full blood count and coagulation study to be collected.

Observations

- Hourly TPR for the first 4 hrs after admission an initial blood pressure should also be taken, if stable may then progress to 4th hourly TPR and 8 hourly BP.
- If any further bleeding occurs contact the ENT registrar.
- **Maintain Hydration**
- Intravenous therapy will be commenced and the child will need to be Nil by Mouth (NBM) until review by ENT registrar.

Removal of Laryngeal Papillomas

Laryngeal papillomas are caused by the human papilloma virus and are the most common tumour of the larynx in children. They sometimes disappear during adolescence and very rarely turn out to be malignant. They are pink, warty looking nodules that can occur anywhere in the larynx but more commonly on the vocal cords. Hoarseness is the initial sign/symptom and if left untreated can eventually lead to dyspnoea and sometimes airway obstruction.

Note: Because papillomas are caused by a virus they cannot be cured but surgery is done to de-bulk them to improve the airway and the voice.

- Recurrence is usual and the child may need multiple admissions.
- Surgery is usually carried out at CHW as a Day Stay Procedure in Middleton by an instrument called a 'microdebrider' but sometimes a laser is used. The procedure is performed in theatre at SCH.

Post-Operative Monitoring and Observations including possible complications

- Temperature, pulse and respirations on return to ward, then hourly for four hours then if satisfactory 4th hourly until discharge
- Tracheostomy patients may have some blood stained secretions overnight.
- Topical lignocaine is routinely used during anaesthesia; in such cases the child must remain nil by mouth for one hour post topical lignocaine. A sip test of sterile water is then offered and if tolerated the child can grade to clear fluids, free fluids and normal diet according to age.

Day Surgery

- If Middleton Day Surgery patient, length of stay postoperatively is 4 hours.
- C1South patients may be discharged after 4 hours if there are no signs of complications, and they are meeting the discharge criteria for C1SW.
- Please refer to Post Operative Care and Discharge in the Middleton Day Surgery Unit Practice Guideline for monitoring and observations performed in recovery.
- Hourly temperature, pulse, respirations and oxygen saturations for 4 hours.
- The child may be discharged after four hours if nurse initiated discharge criteria is met.

Special Instructions on Discharge

- Parents are educated how to recognise the signs of obstructive airway symptoms. Most parents have an arrangement with the Surgeon to contact him/her if concerned. Other patients may phone the ward; take their child to their own doctor; or bring them to The Children's Hospital Emergency Department if they have any concerns.

References

1. Brodie L. Mastoiditis. In: Adams A, Mcquellin C. and Nagy S editors. Nursing the infant, child and adolescent. Sydney; MaClennan and Petty. 1996. Pg. 256.
2. Nelson, W. E. (Editor) Nelson Textbook of Paediatrics. Philadelphia: WB Saunders Co; 1996. Pg. 894.
3. Randall DA, and Hoffer ME. Complications of tonsillectomy and adenoidectomy. Otolaryngol Head Neck Surgery. 1998; 118:61-8.
4. Sigler BA, Schuring LT. Ear, Nose and Throat disorders. St. Louis: Mosby's. 1993; Pp.215-6.
5. Smeltzer SC, Bare BG. Medical Surgical Nursing 7th Edition. Philadelphia: J.B. Lippincott Co.; 1992
6. Stammberger H. Functional Endoscopy Sinus Surgery. Philadelphia: Becker; 1991.
7. Stinson A. Cochlear Implantations in Children. AORN Journal. 1996; Vol. 64. No. 4
8. Thorneman G, Akerval J. Pain treatment after tonsillectomy: advantages of analgesics regularly given compared with analgesics on demand. Acta Otolaryngoly. 2000; 120:986-9.
9. Wong DL. Whaley and Wongs Nursing Care of Infants and Children. St. Louis: Mosby. 1995; Pp.1386-8.
10. Bluestone C, Rosenfeld M. Surgical Atlas of Pediatric Otolaryngology. Hamilton and London: BC Decker Inc,; 2002.
11. Hockenberry M. Wong's Essentials of Pediatric Nursing. St Louis: Mosby Inc; 2005.
12. Wilson M, Helgagottir H.). Patterns of pain and analgesic use in 3 to 7 year old children after tonsillectomy. Pain Management Nursing. 2006 (Dec); 7(4)

Appendix 1: Instillation of Ear Drops

Procedure:

1. Wash hands.
2. Select appropriate ear drops and check against patient's medication chart. Drops should be labelled with the child's name and used only for that child.
3. Warm drops to room temperature.
4. Establish patient's identification against identification label.
5. Have child lie on unaffected side or in the supine position and gently tilt the child's head to one side with affected ear upward.
6. Straighten the patient's ear canal. For children less than 3 years pull auricle down and back as ear canal is straighter. For older children or adults pull the auricle up and back.
7. Using a light source examine the ear canal for discharge and gently wipe the external meatus with a cotton wool ball.
8. Place drop near ear canal opening and allow it to fall against the side of the canal. Avoid touching the ear canal.
9. Instruct patient to remain on his/her side for 5-10 minutes if possible. When getting up, excess drops can be wiped away with cotton wool or a tissue
10. The drops can be gently 'pumped' into the ear by pressing the tragus (the triangular cartilage) at the front of the ear canal
11. Clean and dry outer ear, leaving patient comfortable.
12. Wash hands.
13. Repeat procedure for other ear after 5-10 minutes if necessary.

Appendix 2: Instillation of Nasal Drops

Procedure:

1. Wash hands.
2. Check orders against medication order. Drops should be labelled and used only for the child for whom they have been prescribed.
3. The child's nose should be cleaned if possible by asking the child to blow the nose gently.
4. Tilt the child's head backwards and turned slightly to the side.
5. Place the dropper at the nostril and carefully give the required number of drops without touching the nostril.
6. Instruct the child to remain still for several minutes to allow for absorption. The child should be told not to blow the nose during this period.
7. The spray is held vertically and the head tilted forward with the nostril over spray; the sprayer is angled slightly to point toward the back of the ear on that side and one puff then another is pumped in