Foreign Body - Ear

Background

- Foreign bodies (FB) in the external auditory canal in children are a common presentation to ED.
- It is more common in children less than 7 years or in older children with intellectual impairment.
- Most patients present soon after insertion due to distress, but occasionally may be delayed for days when the asymptomatic child divulges the history or may be discovered incidentally on routine ear examination.
- Removal of foreign bodies from the lateral third of the ear canal is much easier than deeper objects that may require ENT expertise +/- general anaesthesia for safe removal.

General

Types of Foreign Bodies

- A large variety of objects may be implicated. These include beads, plastic toys, vegetation, food, insects, pencils, crayons, cotton buds, paper, and putty.
- The most serious retained FB is the button battery that can cause mucosal damage and necrosis.
- A live insect as the FB is an ENT emergency (insect movement can cause severe distress) and the insect will need to be killed safely and quickly prior to its removal.
  - Options in this case include instilling water or olive oil into the canal and shining a light on the ear.
  - The insect will either “swim” to surface or drown. The dead carcass can be removed in a non urgent manner.
• Sharp objects may cause canal and drum trauma and these usually require ENT referral.

Factors influencing successful removal

• Immobilisation of patient
• Size and shape of FB
• Ability to visualise FB
• Repeated attempts at removal (the first attempt is usually the best chance in a young child)
• Available equipment
• Experience and skill of operator

Assessment

Assessment is the key to determining the most suited technique of removal

• History
  ◦ If event is not witnessed, the child may present with irritation, pain, sensation of a foreign body or loss of hearing
• Examination
  ◦ Usually easily visualised by otoscopy or with a headlight
  ◦ Examination requires a still child and a good light source

Management

• Removal options will depend on the type of object and its location in the canal
• The best suited technique for the particular object and location, will increase the success rate
• Ensure good lighting preferably with a headlight, so that 2 free hands can be used: for traction on ear with one hand and removal of the object with the other hand
• A cooperative or restrained patient (by an assistant) is necessary to provide removal from a still patient
  ◦ Consider sedation techniques. See ED Guidelines: Procedural Sedation and Ketamine Sedation

First choice

• Is normally under direct vision with surgical instruments such as an ear probe, alligator
forceps or hook
- In general the probe or hook should be guided along the canal wall past the object and then used to pull the FB out from behind

**Alternative Techniques**

- Suction requires a smooth spherical object and can be successful provided a good seal is obtained between the end of the suction catheter and object
- Removal under a general anaesthetic by an ENT surgeon is indicated if simple techniques fail in the ED

**Indications for ENT Team consultation**

- Failure to remove object
- Evidence of trauma
- Button battery foreign body
- Penetrating foreign body

**Nursing**

Routine nursing care.

**Tags**

aural, canal, ear, external, extraction, fb, forceps, foreign body, net, removal, remove

**References**

<table>
<thead>
<tr>
<th>Last Reviewed:</th>
<th>7 June, 2017</th>
<th>Review Date:</th>
<th>7 June, 2020</th>
</tr>
</thead>
<tbody>
<tr>
<td>Approved by:</td>
<td>Dr Meredith Borland</td>
<td>Date:</td>
<td>7 June, 2017</td>
</tr>
<tr>
<td>Endorsed by:</td>
<td>Medical Advisory Committee</td>
<td>Date:</td>
<td>7 June, 2017</td>
</tr>
<tr>
<td>Standards Applicable:</td>
<td>NSQHS Standards:</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

**Printed or personally saved electronic copies of this document are considered uncontrolled**