

Earmold Impressions

If you are new to earmold impressions, make sure to review the lesson, *Introduction to Earmold Impressions*, for important background information.

Materials

- CARL
- CARL EMI ears
- Illumination
- Earlight/Penlight with tip
- Impression material
- Selection of otoblocks/dams
- Impression syringe
- Impression gun and accessories

Learning Outcomes

- Effectively use bracing techniques during otoscopy and earmold impression stages
- Utilize techniques to create earmold impressions
- Understand earmold impression process/stages

Consent

Prior to engaging in any procedure, you must obtain informed consent from the client. For more information, consult with your licensing body.¹



CARL ready for an earmold impression

¹ Obtaining consent by the College of Audiologists and Speech-Language Pathologists (CASLPO)
http://www.caslpo.com/sites/default/uploads/files/GU_EN_Obtaining_Consent_for_Services.pdf

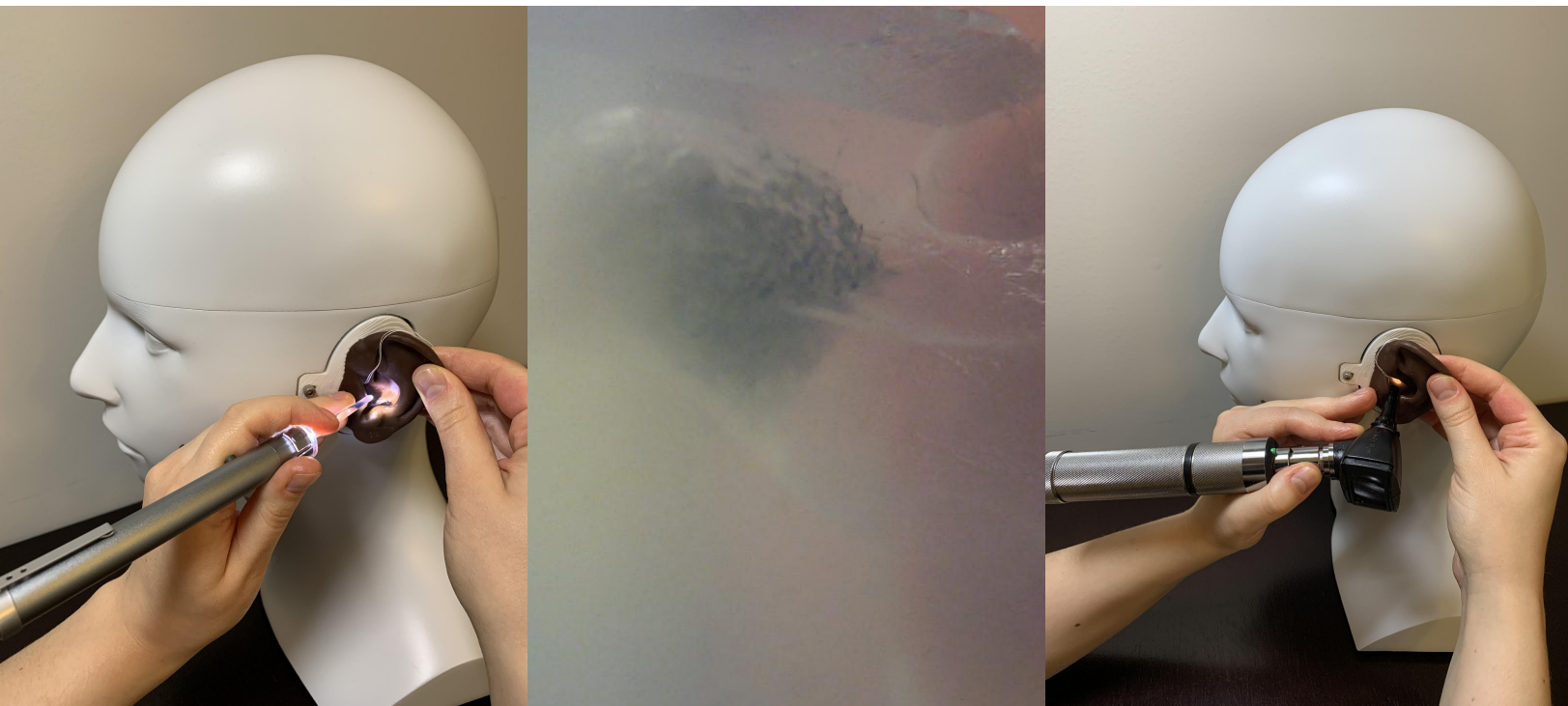
Procedure

Step 1: Otoscopy

1. Perform otoscopy using techniques from *Otoscopy Quick-Guide*.
 - During the ear examination work through the flow chart found in the *Introduction to Earmold Impressions Quick Guide*.

Step 2: Otoplast Selection & Placement

1. Use the otolight to carefully place an otoplast in the correct position, ideally past the second bend, about 5 mm², especially for a deep-fitting hearing aid.
 - Pay attention to the amount of ease it takes to position the otoplast; easier insertion may indicate a widening in the canal which could make it difficult to remove the impression.
2. Using otoscopy, check that the otoplast is positioned at the proper depth and that there are no spaces where impression material can flow through.



Place

Check

² Dillon, H. (2012). Hearing aid earmolds, earshells and coupling systems. In *Hearing aids* (2nd ed., pp. 127-169).Boomerang Press.

Step 3: Impression Material Selection & Mixing

1. Select impression material, mix completely, and quickly, according to the manufacturer's guidelines.
2. Place impression material into the syringe and ensure the plunger stopper is at the plunger tip. Push plunger stopper until material has reached the end of the syringe.

Step 4: Taking an Impression

1. Using proper bracing techniques, insert the tip of the syringe into the ear canal without plugging the canal. Inject the material into the canal with constant but not excessive pressure and small, circular motions to fill the canal, concha, tragus and helix areas.
 - As the ear fills, the material will flow back onto the tip. When there is about 6mm³, start to slowly remove the syringe laterally while maintaining pressure and keeping the end of the syringe surrounded in the material.
2. Allow the material to harden, around 5-10 minutes (refer to the manufacturer's instructions).

Tip: If making an ITC or ITE while material is soft, you can use an edge to make a horizontal indent in the impression to assist manufactures with the placement of the directional microphone ports.

3. Check if the impression is completely hardened by using a fingernail; if no mark is made then it is ready to be removed.
4. Gently move pinna in a circular motion while removing the impression first by releasing the helix and rotating the Impression forward toward the patient's nose.

Tip: Instruct the patient to open and close their jaw to relieve pressure especially for deep Impressions.



³ Dillon, H. (2012). Hearing aid earmolds, earshells and coupling systems. In *Hearing aids* (2nd ed., pp. 127-169).Boomerang Press.



Step 5: Inspect Ear & Impression

1. After removing the impression, check the ear with the otoscope.
2. Examine impression and check for the following:
 - ✓ Past second bend
 - ✓ Free from air pockets, creases, & underfilled areas
 - ✓ Connected to otoblock
 - ✓ Includes all anatomical structures (i.e. helix)

Step 6: Document & Complete Order

1. Document procedure, as outlined by your licensing body.
2. Complete manufacturer order form (optional)

Step 7: Repeat Procedure on the other side and then try the *Earmold Impressions: Case Studies* lesson.

