Part B: Evaluating Ear Impression

The ear impression requirement for the NCHALB examination (Part B: Practicum) is to produce an ear impression that can be used to make a full-shell earmold for use with a high-gain hearing instrument suitable for a severe sensorineural hearing loss. This requirement is for both ear impressions. Use the following guidelines to make your ear-impressions:

- Each ear impression must include the full helix, crus of the helix, tragus and antitragus. **IMPORTANT:** The canal depth of the ear impression must clearly indicate the second bend of the ear canal.
- The material used to make the ear impression should be made of high-viscosity silicone to increase the accuracy of defining the anatomical details needed for a full-shell ear mold. Professional evaluators will note the absence of skin contact in areas critical to a secure fit and adequate seal. Lack of skin contact is evidenced by shiny areas on the surface of the impression material.
- To make an ear impression for a high gain hearing instrument, it is recommended to make the impression with the client's mouth closed to insure better canal retention.

**Figure 1**

References:
Figures 2 – 7 are pictures and descriptions of ear-impressions that meet the criteria for making a full-shell ear mold.

**Figure 2**

- Well-formed helix/antihelix for helix-lock option
- Completely filled concha
Well-formed helix/antihelix for helix-lock option

Figure 3
Well-defined and -filled area between tragus and antihelix
Oto-block is flush with the medial end of the canal.

Impression material clearly passed the 2nd bend.
Oto-block is approximately the same diameter as the medial end of the canal.

Well-defined tragus
Completely filled and well-defined concha

Clearly defined transition between the lateral edge of the concha and lip of the helix

Figure 7
Impression material has seeped past the otoblock (blow-by).

Otoblock is not flush with the medial end of the ear-impression.

Figures 8 – 15 are pictures and descriptions of ear-impressions that do not meet the criteria for making a full-shell ear mold.
Inadequate definition of the EAM: Impression material did not reach second bend

Incomplete fill of the EAM past the 1st bend.
Appears that otoblock is too large for the EAM; however, difficult to determine because of EAM underfill.

Underfilled helix/antihelix necessary for helix lock.
Inadequate definition of the tragus (laterally) necessary for a tragus lock.

Inadequate definition of the antihelix in the area between the tragus and helix.

Underfill between helix and antihelix.

The shiny appearance of impression material indicates no skin contact.

The large weld in this area appears as a cleft in the material.