

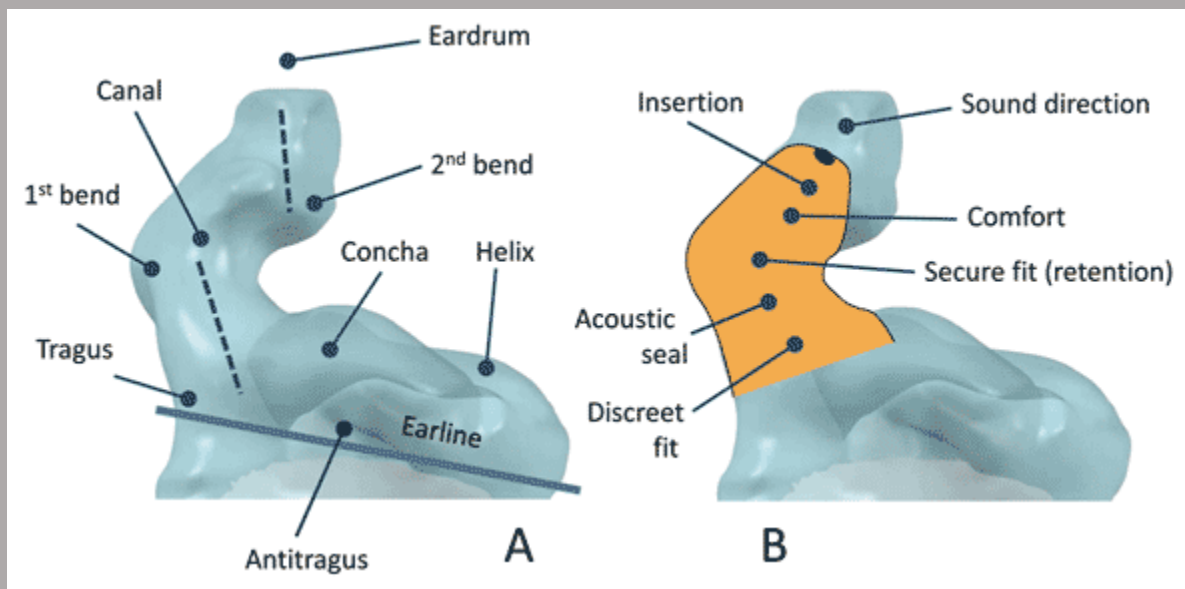


Part B: Evaluating Ear Impression

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:

Adapted from: <https://www.head-fi.org/f/threads/empire-ears-athena-impressions-thread.787793/> retrieved 5/20/2017

Pirzanski, C. (2006). Earmolds and Hearing Aid Shells: A Tutorial Part 4: BTE Styles, Materials, and Acoustic Modifications, *The Hearing Review*. 2000;7(10):22-27. Available at: <http://www.hearingreview.com/2006/08/earmolds-and-hearing-aid-shells-a-tutorial-part-4-bte-styles-materials-and-acoustic-modifications/>

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

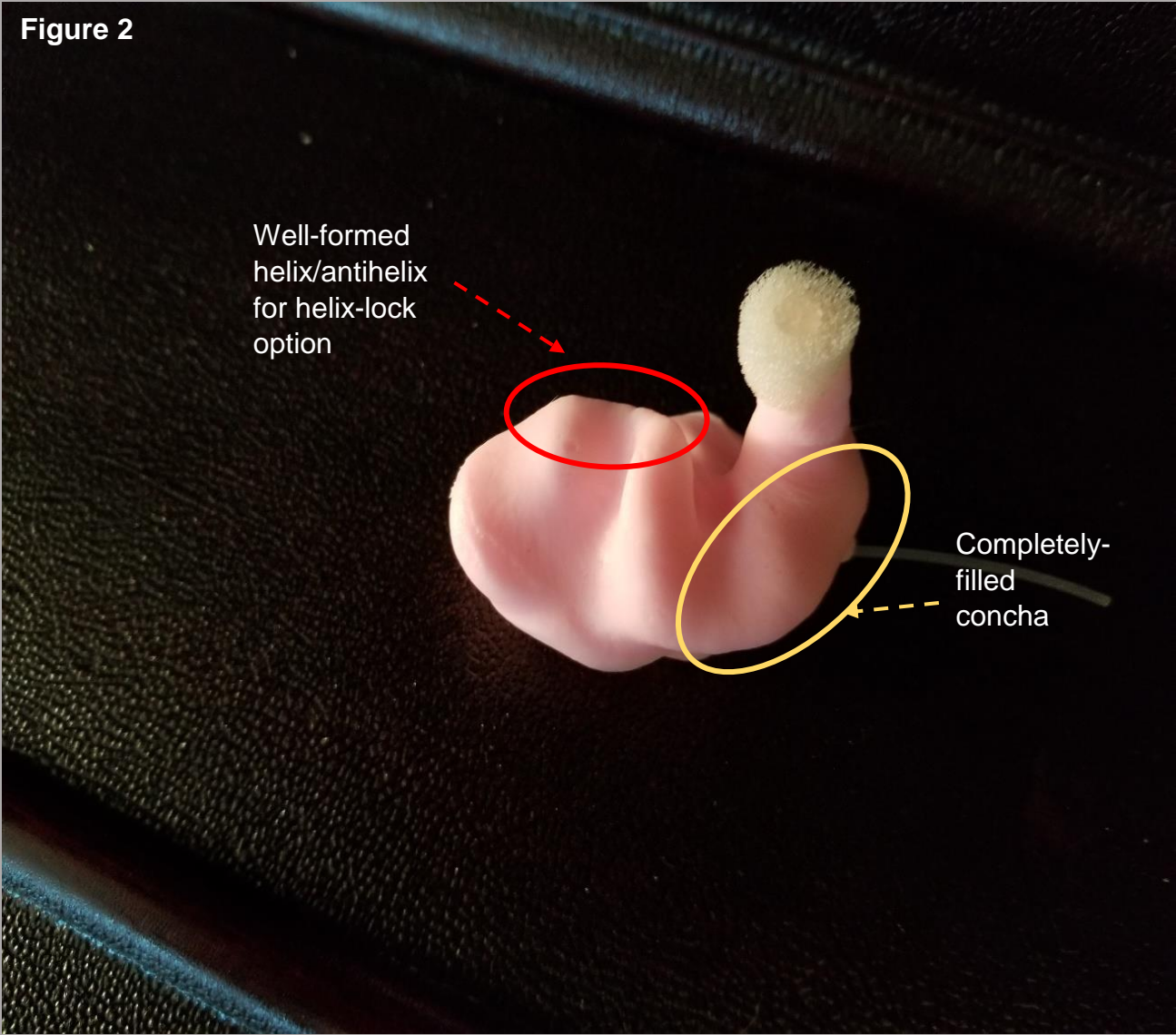
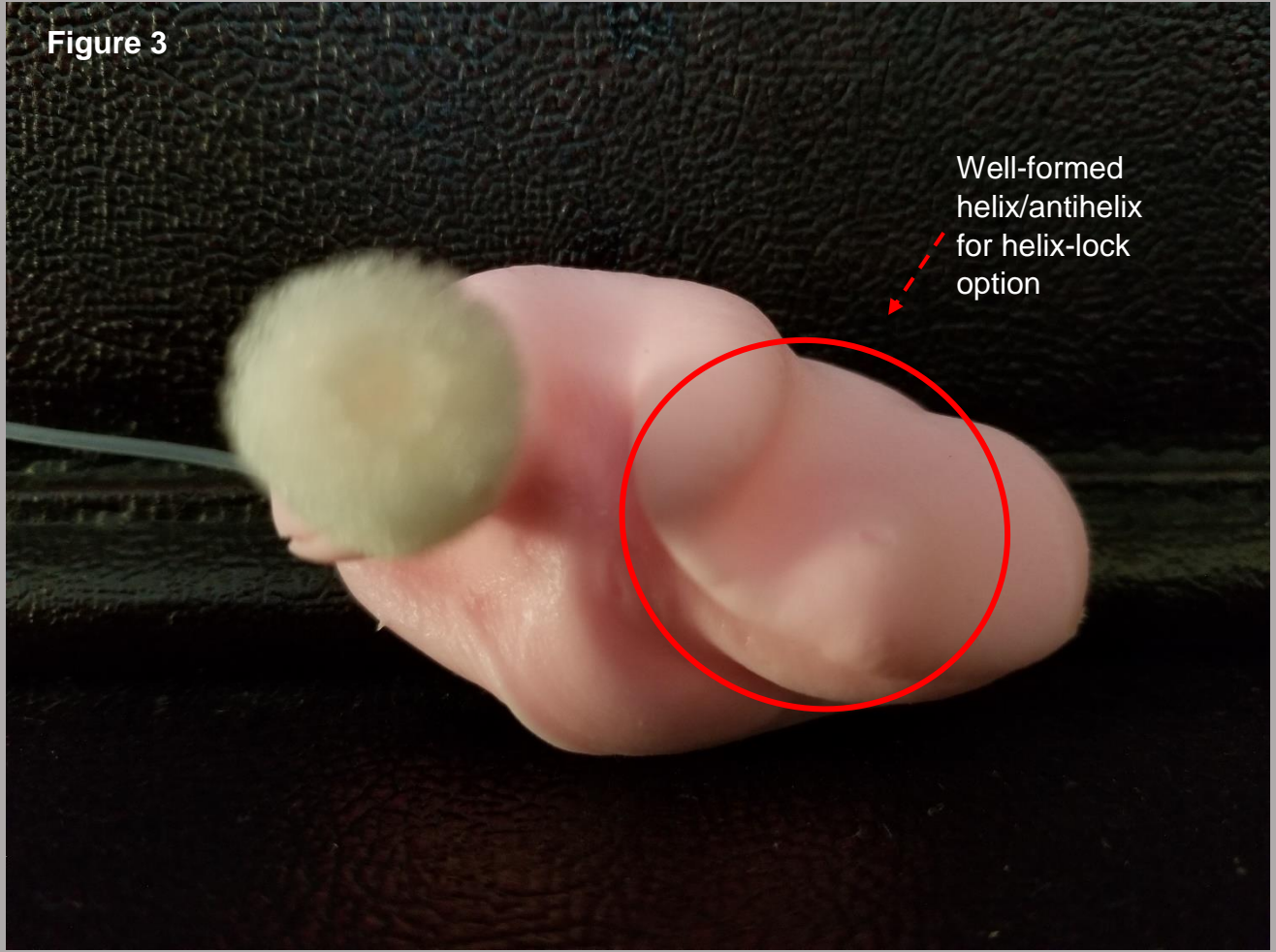


Figure 3



Well-formed
helix/antihelix
for helix-lock
option

Figure 4

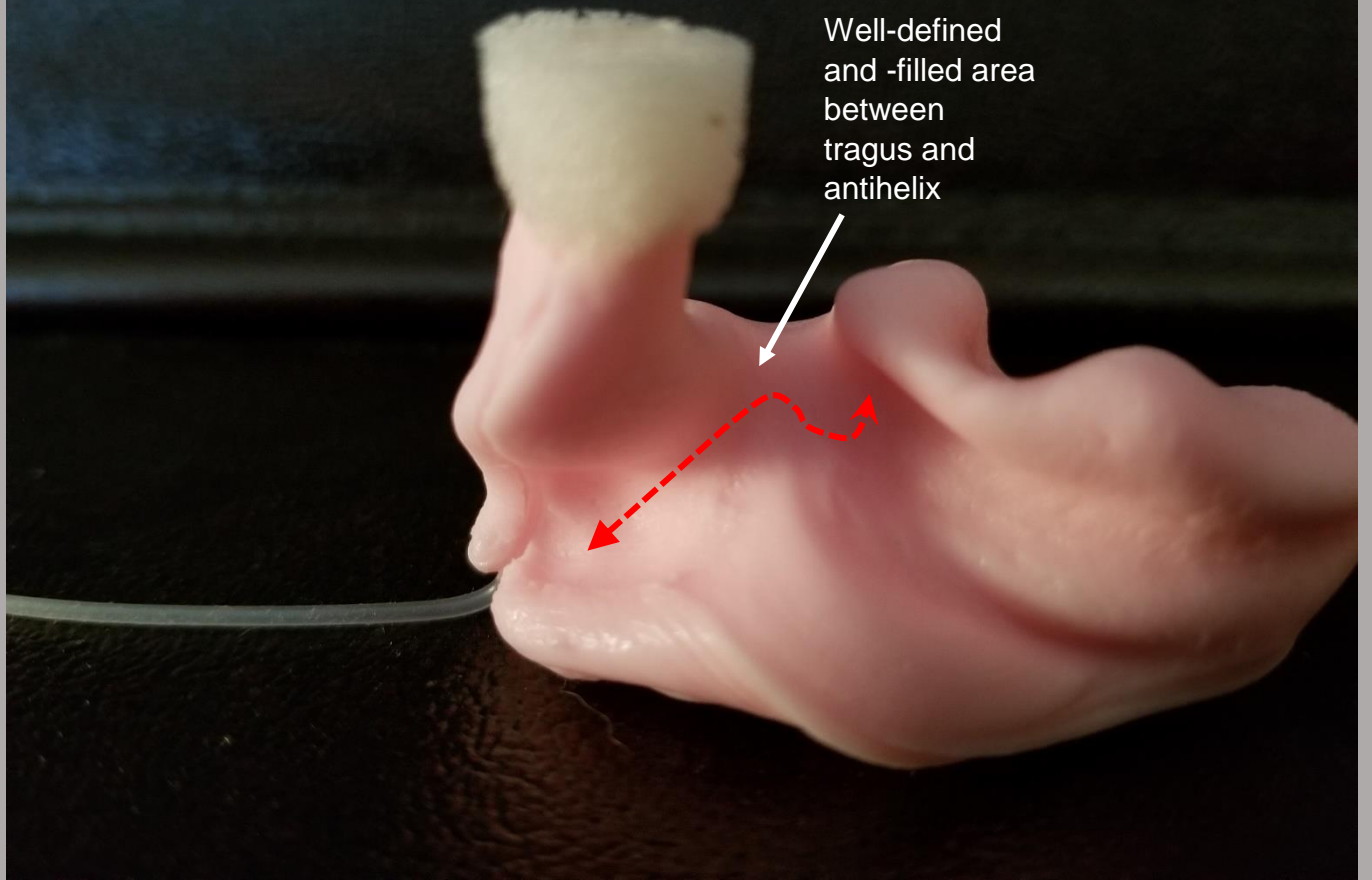


Figure 5

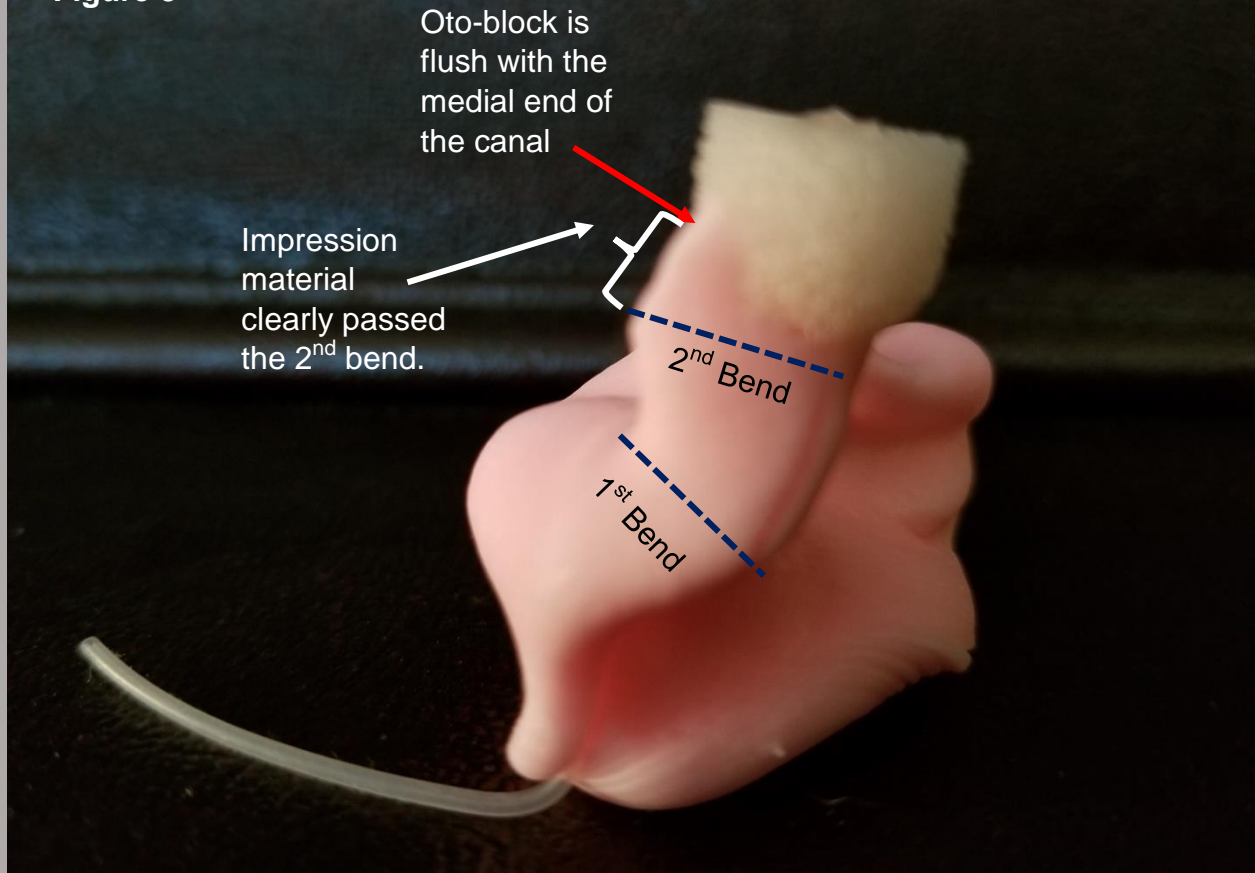
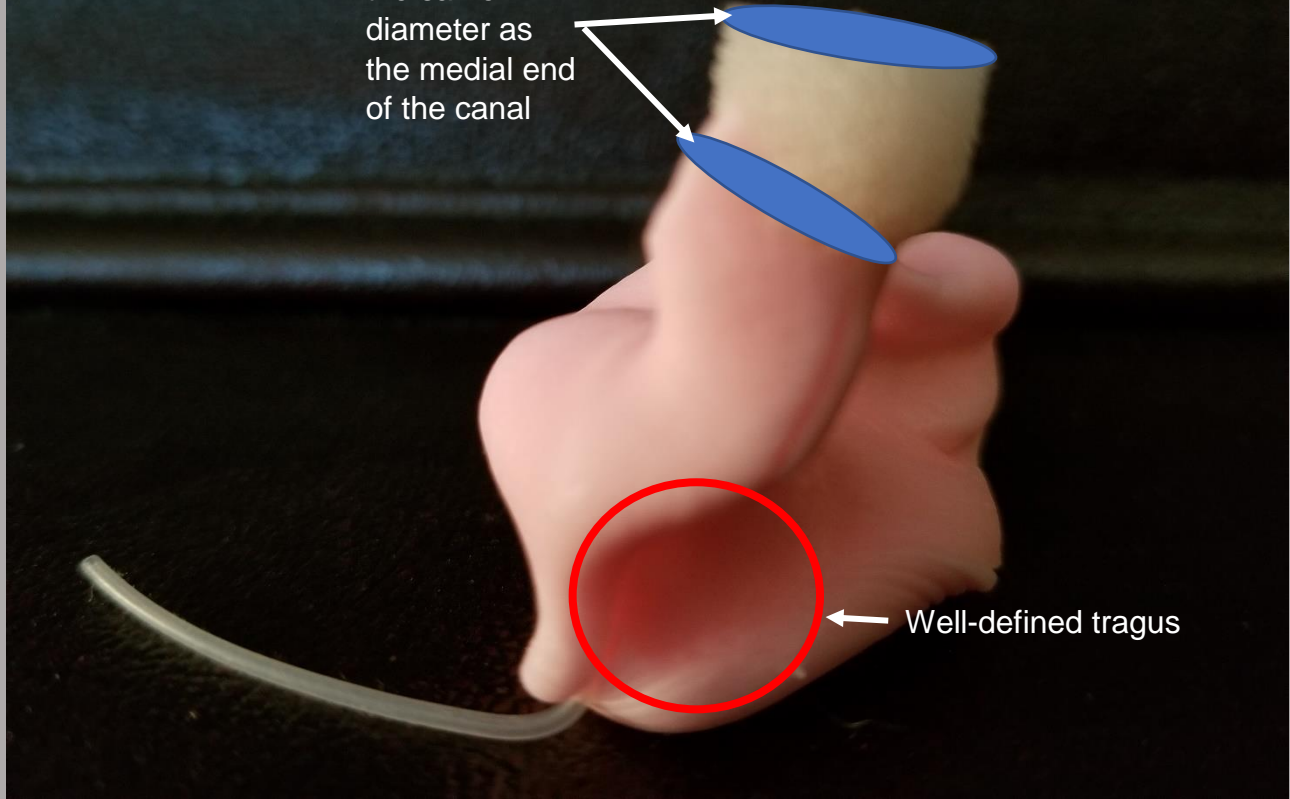


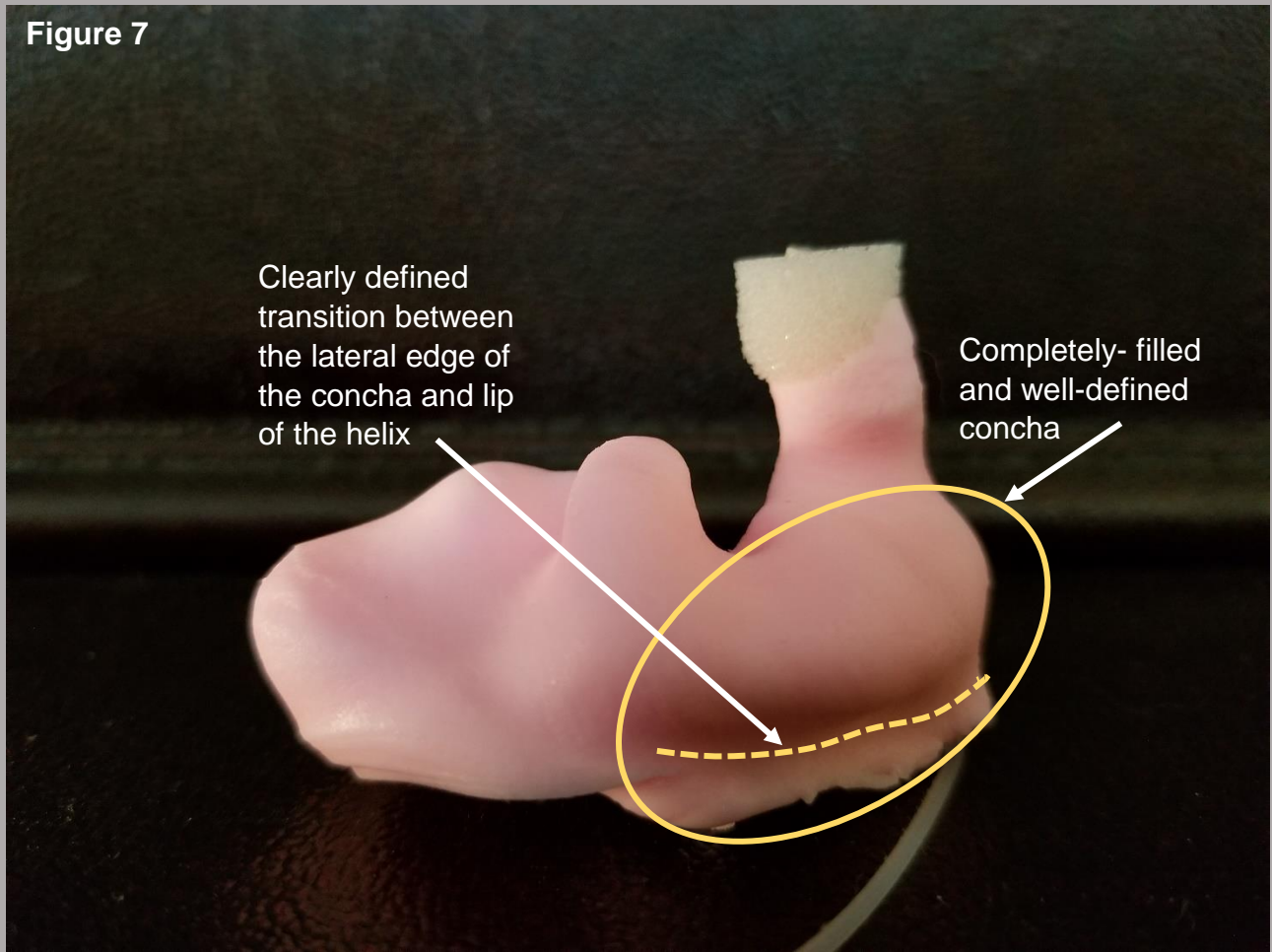
Figure 6

Oto-block is approximately the same diameter as the medial end of the canal



Well-defined tragus

Figure 7



Figures 8 – 15 are pictures and descriptions of ear-impresions that **do not** meet the criteria for making a full-shell ear mold.

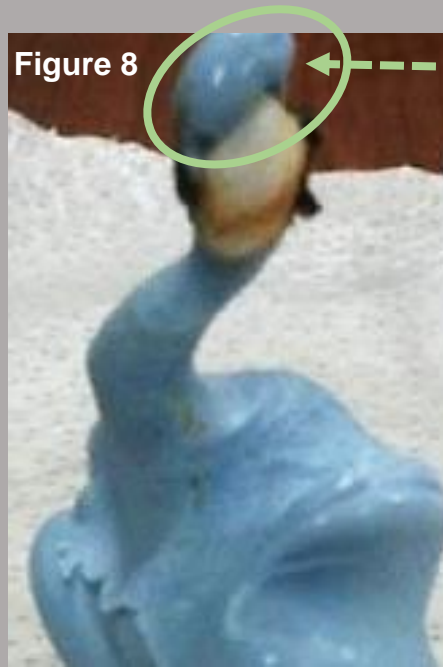


Figure 8

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

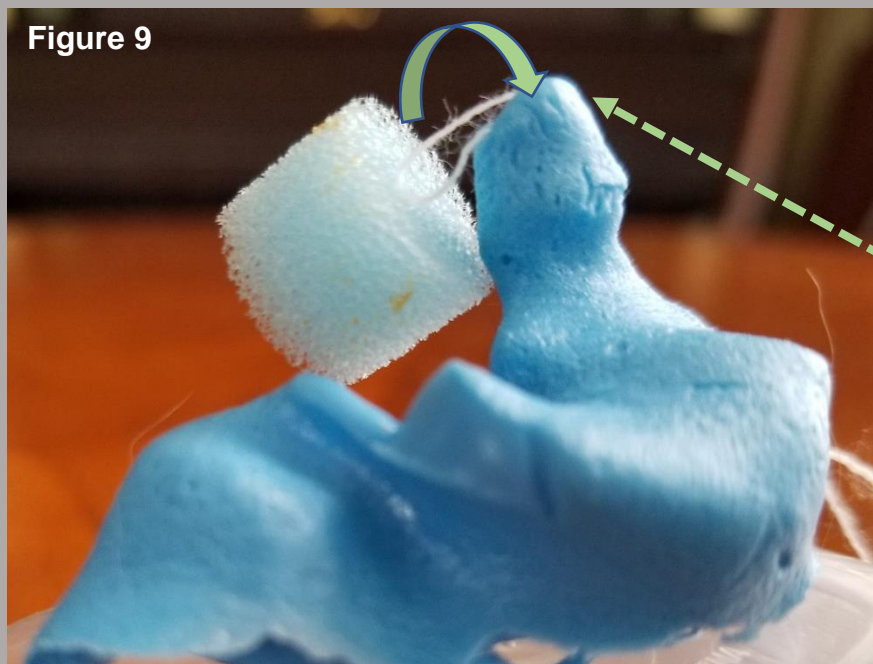


Figure 9

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

Figure 10



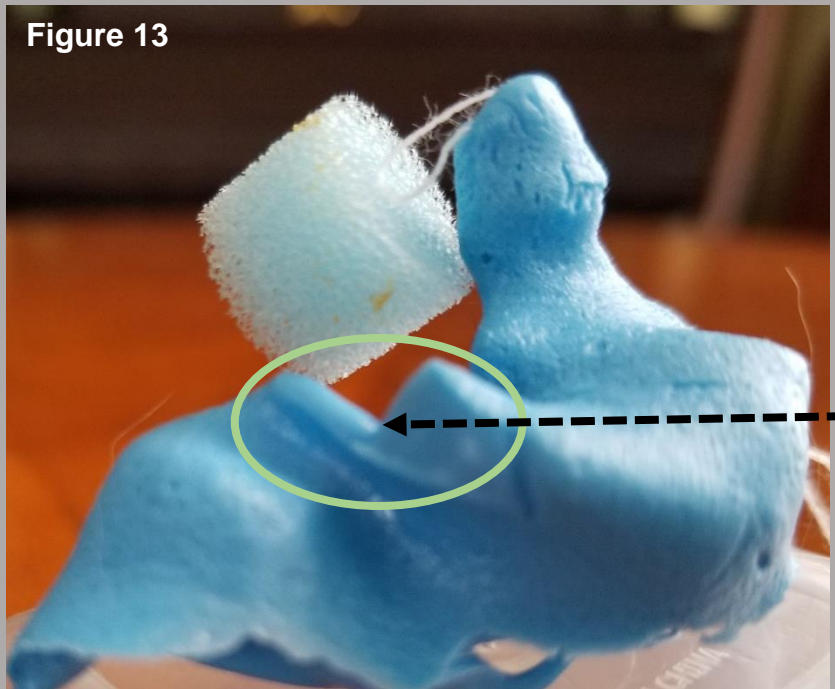
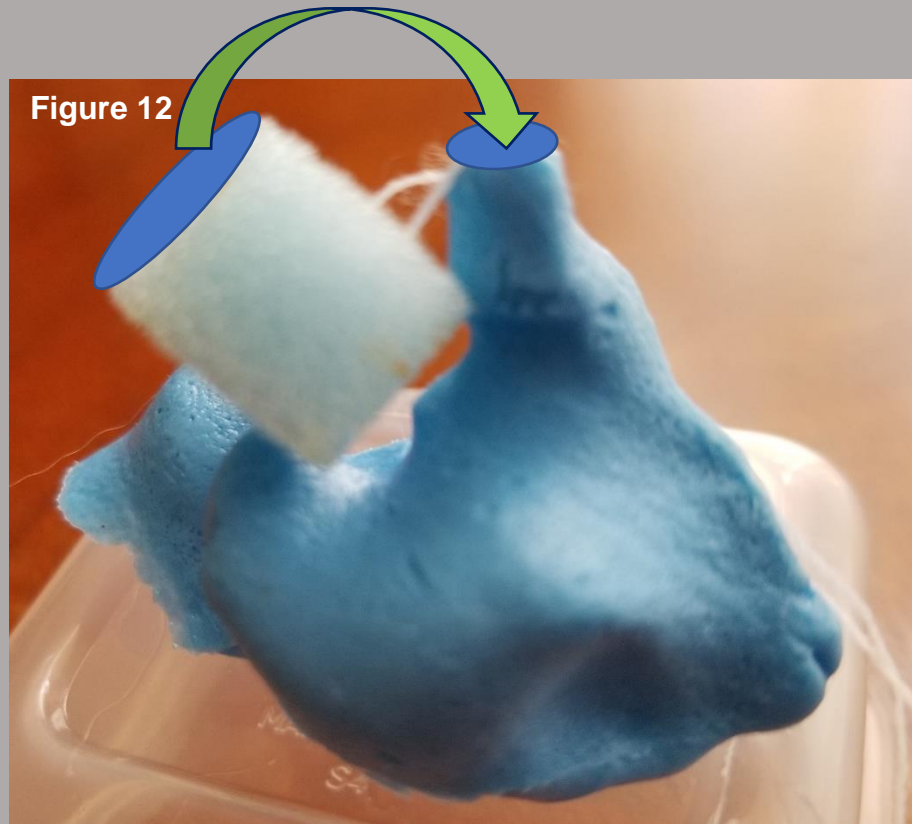
Inadequate definition of the EAM:
Impression material did not reach
second bend

Figure 11



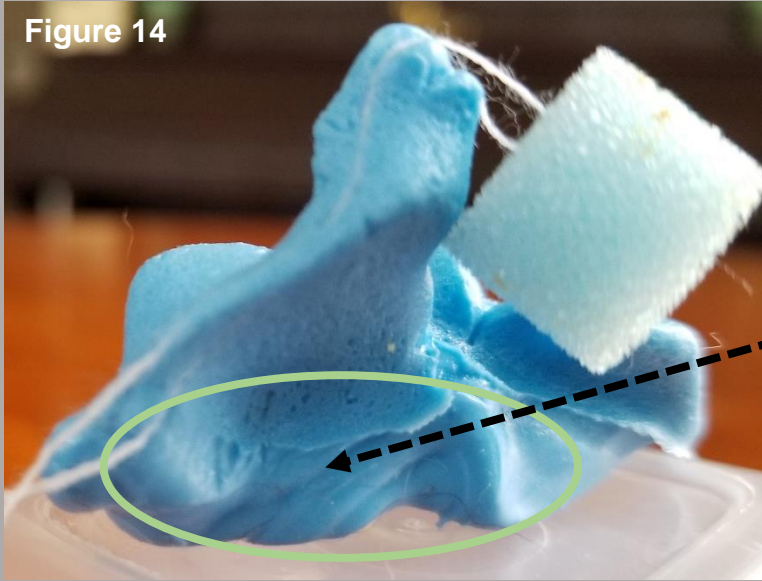
Incomplete fill of the EAM past the
1st bend.

Appears that otoplasty block is too large for the EAM; however, difficult to determine because of EAM underfill.



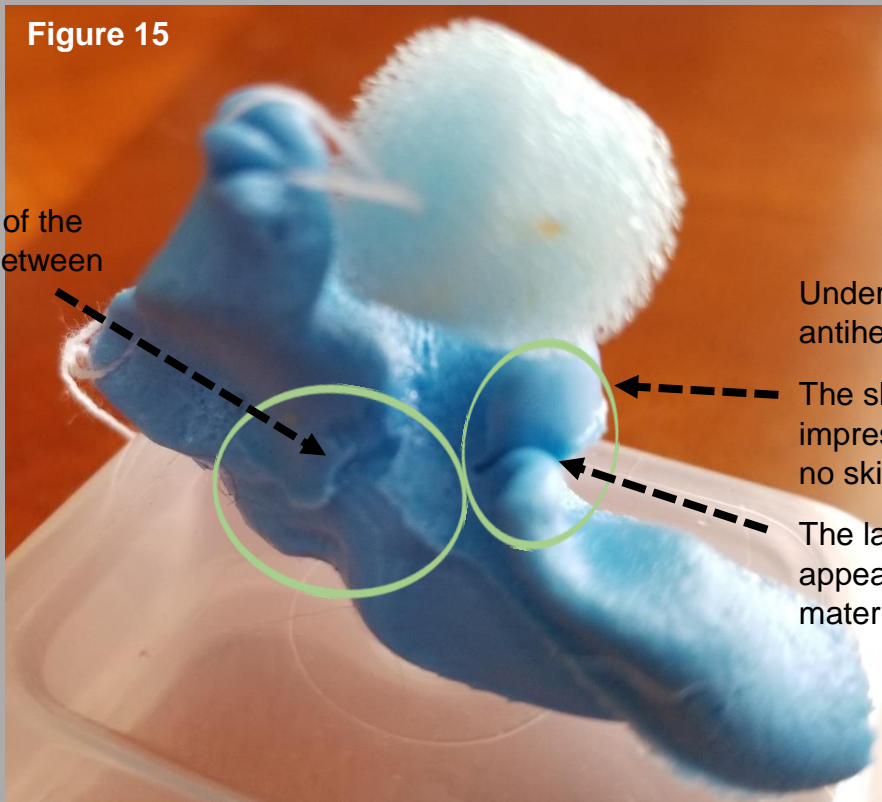
Underfilled helix/antihelix necessary for helix lock.

Figure 14



Inadequate definition of the tragus (laterally) necessary for a tragus lock.

Figure 15



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.