

Needs Analysis Survey for Endoscopic Ear Surgery

This research study aims to understand why totally endoscopic ear surgery has had a low rate of adoption and practice thus far and how to increase its use among otologists. This voluntary survey's objective is to collect data to answer these research questions by surveying practicing otologists, and to publish the results in a research journal to fill this knowledge gap. The survey will be conducted via a two-round Delphi method. The responses of this survey will be collated to develop a second round of more specific questions, which will be sent out in another survey. The results will then be analyzed and presented in a paper in an otology research journal.

It is important to note that this survey is completely voluntary and will remain confidential and anonymous to the researchers. There will be no way to identify the participant to their answers to the survey. As well, participation or non-participation in this survey will not affect your professional integrity in any way. This survey is purely for research purposes.

By answering the questions in the survey and submitting it, it will be implied that you consent to filling out your survey and the researchers using the anonymous data to analyze and present it.

We thank you for your time. Please click below to begin.

Thank you!

- 1) How many years of experience do you have with Endoscopic Ear Surgery (EES)?
 - ☐ < 1
 - ☐ 1-3
 - ☐ 4-7
 - ☐ >8
- 2) Approximately what percentage of totally EES do you currently do (i.e. percentage of cases without a microscope)?
 - ☐ 0%
 - ☐ Up to 5%
 - ☐ Up to 25%
 - ☐ Up to 50%
 - ☐ Up to 75%
 - ☐ Up to 100%
- 3) What surgeries do you use EES for?
 - ☐ Cholesteatoma removal
 - ☐ Tympanoplasty
 - ☐ Ossicular Repair
 - ☐ Other
 - ☐ None of the Above
- 4) If other, please specify which surgeries.

- 5) Do you currently use any of these dedicated EES instruments?
 - ☐ Spiggle and Theis Panetti Instrument Set
 - ☐ Storz Endoscopic Middle Ear Surgery Instrument Set
 - ☐ Grace Medical IWGEES Set
 - ☐ Other
 - ☐ None
- 6) If other, please specify which instrument set is used.

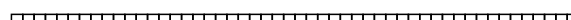
- 7) What are the factors that hinder your use of EES? (Please check all that apply)
 - ☐ One handed surgery
 - ☐ Bleeding control
 - ☐ Effect of endoscope on depth perception of the surgical field
 - ☐ Other
 - ☐ None
- 8) If other, please specify what factors.

- 9) What are things you find difficult during EES?
(Please check all that apply).
- 10) What functionality of instruments do you think will improve your experience with EES? (Please circle all that apply)
- 11) If other, please specify what instrument functionalities you would like.
- 12) If there is a tool that can reach within the recesses in the middle ear, what would you like the tip function to be?
- 13) Please specify the tip function that you would like to use, or explain why it is unnecessary to reach within this recesses.
- 14) Indicate the importance of a tool that can facilitate graft movement and positioning.
- 15) Indicate the importance of a tool that can suction.
- 16) Indicate the importance of a tool that can cut.
- 17) Indicate the importance of a tool that can grip (e.g. grip a cholesteatoma or ear drum graft).
- 18) Indicate the importance of a tool that can reach hidden recesses within the ear.
- ☐ Gripping and/or moving an ear drum graft
- ☐ Cutting the ear drum graft into the appropriate shape
- ☐ Gripping and/or moving the cholesteatoma
- ☐ Keeping tissues in place or in tension while cutting or dissecting
- ☐ Keeping the operative field clean
- ☐ Accessing areas within the hidden recesses in the ear (e.g. antrum, sinus tympani)
- ☐ Accessing areas that are visible via endoscope (but cannot be reached by conventional instruments)
- ☐ Keeping the endoscope lens clean
- ☐ Suction integrated with another functionality (e.g. suction + curette or suction + forceps)
- ☐ Suction actuated by a pedal (rather than with a finger plug hole)
- ☐ Increasing accessibility of instrument tips to reach all areas within the viewing angle of the endoscope
- ☐ Drill with suction and irrigation
- ☐ Other
- ☐ None
- _____
- ☐ Gripping something (e.g. forceps)
- ☐ Suctioning
- ☐ Cutting
- ☐ Dissecting
- ☐ A combination of the above (please specify in the next question)
- ☐ Other (please specify in the next question)
- ☐ It is unnecessary to reach within these recesses during EES (please specify in the next question)
- _____
- Not Important Most Important
- =====
- (Place a mark on the scale above)
- Not Important Most Important
- =====
- (Place a mark on the scale above)
- Not Important Most Important
- =====
- (Place a mark on the scale above)
- Not Important Most Important
- =====
- (Place a mark on the scale above)
- Not Important Most Important
- =====
- (Place a mark on the scale above)

19) Indicate the importance of a tool that can cut bone.

Not Important

Most Important



(Place a mark on the scale above)

20) Is there a specific instrument that you have used before or seen that you would like to be adapted for use in EES?
