

Needs Analysis Survey for Endoscopic Ear Surgery

There is growing interest amongst otologists worldwide around the use of endoscopes in ear surgery. As most ear surgery instruments were developed for use with the microscope, it is possible that changes in instrument design for use with endoscopes may allow more procedures to be completed effectively with a totally endoscopic approach. This project is a not for profit initiative to stimulate the development of instrumentation optimized for endoscopic ear surgery. This survey aims to investigate the suitability of currently available instruments for use in endoscopic ear surgery and identify priorities for improvements in instrument design.

The approximate time to complete the survey is 5 minutes. 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.

By completing and submitting the survey, it will be implied that you consent to the researchers analyzing and presenting it. You may decide not to be in this study, and may withdraw at any time before submitting the survey.

This survey is completely voluntary and will remain confidential and anonymous to the researchers. This survey is purely for research purposes.

We thank you for your time. Please continue to begin.

- 1) Approximately what percentage of ear surgery do you currently complete totally endoscopically (i.e. percentage of cases without a microscope)?
 - ☐ 0%
 - ☐ Up to 50%
 - ☐ 50%-90%
 - ☐ More than 90%
- 2) Do you currently use any instruments developed specifically for endoscopic ear surgery? (e.g. Storz, Spiggle and Theis Panetti, Grace Medical Endoscopic Ear Surgery instrument sets)?
 - ☐ Yes
 - ☐ No

Would a tool that addresses the following difficulties experienced during endoscopic ear surgery be of use to you?

- 3) Bleeding control
 - ☐ Very useful
 - ☐ Somewhat useful
 - ☐ Not very useful
 - ☐ Not at all useful
- 4) Inability to reach structures visualized by endoscope
 - ☐ Very useful
 - ☐ Somewhat useful
 - ☐ Not very useful
 - ☐ Not at all useful
- 5) Difficulty cutting/removing bone
 - ☐ Very useful
 - ☐ Somewhat useful
 - ☐ Not very useful
 - ☐ Not at all useful
- 6) Keeping the endoscope lens clean
 - ☐ Very useful
 - ☐ Somewhat useful
 - ☐ Not very useful
 - ☐ Not at all useful
- 7) Moving and positioning a graft into the intended place
 - ☐ Very useful
 - ☐ Somewhat useful
 - ☐ Not very useful
 - ☐ Not at all useful

8) Dissection and removal of cholesteatoma

- ☐ Very useful ☐ Somewhat useful
☐ Not very useful ☐ Not at all useful

9) Are there any other instruments that you would like to see modified or developed for endoscopic ear surgery? Please give examples

10) Please add comments on the validity of this survey (e.g. were any questions difficult to understand, should any questions be added or removed?)
