

Presenting Author: **David Morris**

David Morris¹, Myrthe Hol², Jaydip Ray³, Joe Toner⁴, Bill Hodgetts⁵

¹Dalhousie University, ²ENT Surgeon - Otolaryngology, Hearing & Implants, Radboud University Medical Centre Myrthe.Hol@radboudumc.nl, ³ENT Consultant, Sheffield Teaching Hospitals & Sheffield Children's Hospital, England, UK., ⁴ENT Consultant, Queen's University, Belfast, Northern Ireland, UK., ⁵Program Director, Bone Conduction Amplification Institute for Reconstructive Sciences in Medicine (iRSM) Edmonton, Alberta, Canada

Learning Objectives: Participants will feel able to describe the issues faced by those with unilateral sensorineural hearing loss / single sided deafness (SSD). Participants will appreciate the limitations to rehabilitation of SSD with bone conduction hearing devices. Participants will become familiar with a range of bone conduction hearing devices, described by surgeons who are experienced in their placement. Participants will understand the role of case selection and will appreciate the place for preoperative testing. Participants will appreciate that the personal choice of device selected to address SSD relies on many intertwining factors relating to the surgeon, audiologist and recipient and must also include financial and logistical considerations. Participants will realize the complexities and challenges faced when we attempt to make comparisons between the audiometric performance of such devices.

This lively, one hour round table will bring together colleagues from five experienced auditory implant programmes to share their experience with a range of bone conduction hearing devices now used to rehabilitate patients with unilateral sensorineural hearing loss often referred to simply as single sided deafness or SSD.

The panelists have been selected for their experience with particular devices or for their expertise in audiometric assessment. After a brief introduction, invited panelists will offer their views on a number of controversial topics. It will be interesting to see how much consensus and common ground exists between the different programmes and devices in this regard.

Specific attention will focus on a number of key areas that will guide our discussions:

Selection criteria - is there an age limit to consider at presentation, and if so, how relevant is the state of contralateral cochlea?

Pre-operative trials - short and in-office or prolonged, pre-directed home trial? Is there a place for headband testing with some other surrogate device for transcutaneous implant candidates?

Ease of surgical placement - have the panel experience any notable or avoidable complications?

Device tolerance - are the devices practical to wear day to day?

Postoperative limitations - how relevant are imaging restrictions and removability?

Money - are there any major cost differences between the devices and the resources needed to implant them?

Post-operative performance - how do we begin to determine patient benefit let alone compare the performance of different devices?

Best of breed - one vote - why?

Where will we be in 10 years?

Myrthe Hol will share her Nijmegen, NL, experience on BAHA and Ponto devices, Joe Toner from Belfast, Northern Ireland, will share his extensive experience with Bonebridge, Jaydip Ray from Sheffield, UK, will cover BAHA Attract and Sophono, and Bill Hodgetts from Edmonton, Canada will address the perils of trying to compare device performance.

doi:10.1017/S002221511600431X

Modern training of otologic surgery (N835)

ID: 835.1

Training for otologic surgery: From simulators to OR

Presenting Author: **Daniele Bernardeschi**

Daniele Bernardeschi

Pitié-Salpêtrière Hospital

Learning Objectives:

The aim of this presentation is to describe the different steps of training in otologic surgery: first of all, the surgical simulators are used at the very beginning of the training to evaluate the anatomical knowledge of the resident. Therefore, simulators can provide comparison from different trainers and evaluation of the skill progress.

The next step is the drilling of an artificial temporal bone: this can improve the representation of the 3rd dimension when approaching the temporal bone anatomy: the artificial temporal bone has the advantages of being infectious disease free and low cost compared to cadaveric temporal bone, and the disadvantages are the poor haptic feedback and the lack of surgical scenarios.

After that, the training on cadaveric temporal bones allows the acquisition of a realistic haptic feedback and tool-organs interaction as well as the best anatomical representations of the temporal bone. Surgical procedures can also be simulated on cadaveric temporal bone.

Then the training in the OR is performed with two tools that help the resident in the localization of the facial nerve (the facial nerve stimulating burr) while drilling, and in the recognition of anatomical variations (the computer-assisted surgical navigation) in case of difficult surgeries, always under the supervision of the senior surgeon.