Applying ReSound Tinnitus Solutions

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Learning Objectives:

• Participants will be able to demonstrate programming of ReSound’s Tinnitus Sound Generator (TSG) feature, using compatible products, within Aventa software
• Participants will be able compare and contrast uses of TSG, uses of ReSound Relief app, and uses of ReSound supplementary educational materials
• Participants will be able to navigate and explain the TSG adjustment screens in the ReSound Smart app
NOT Objectives:

• Instructor will not be all-knowing about tinnitus treatment and sound therapy theory
• Participants will NOT be tinnitus treatment experts
• Participants will NOT all agree on the best way to treat tinnitus
• Participants will NOT find the cure to tinnitus

What is Tinnitus?

• Tinnitus is an involuntary sound perception originating inside the head
• May be perceived in one or both ears, or unlocalized
• Constant or intermittent
• Usually subjective
• Described as: ringing, buzzing, hissing, roaring, chirping, seashell, other
• A symptom, not a disease

• So… what is tinnitus therapy and who does it
Breaking the vicious cycle

Who here does tinnitus treatment?

Applying ReSound Tinnitus Solutions

These case studies illustrate patients’ issues with tinnitus and personalized ReSound solutions.

Mr. Jackson  Mrs. Hart  Mr. Guy
Mr. Jackson

- 40 year old attorney, junior associate
- Mild notched SNHL in both ears
- Has played in a band for 20 years
- Tinnitus is his primary concern
- Tinnitus x several years
- No medications
- Has never worn hearing aids
- Gradually noticing difficulty hearing
  - Courtroom
  - Board meetings
  - Telephone

Questions for Mr. Jackson
Answers from Mr. Jackson

Describe your tinnitus.
"The best I can describe it is 'ringing.' It's there most of the time, and sometimes it seems louder than others. The courtroom seems to be where my tinnitus goes crazy, gets louder, surges... especially during high stress cases"

Tell me more about your courtroom difficulties.
"I feel like the witnesses get intimidated or nervous and then talk more softly... mumbly."

Tell me more about your board meeting difficulties.
"I feel like the ringing makes it so I can't understand the people at the other end of the boardroom table sometimes."

What do you do for your ears while playing in the band?
"I've been thinking about musicians' earplugs like my drummer has."

What kind of phone do you have?
"I have an iPhone 6 and it's my lifeline. I use it to manage my schedule, my tasks, reminders, conference calls, grocery lists, focus groups, twitter, facebook, pet-cam, household electronics..."

Mr. Jackson

Fit with LiNX² 761 RIEs in both ears
TSG enabled in program 2
TSG settings:
- 43 dB SPL
- HI Microphone ON
- Sound preset = White noise
- Amplitude modulations = OFF
- Volume Control = Volume Control, -12/+6

HI settings:
- Program 1 = All-Around, defaults
- No phone settings, damaged iPhone
- Wants to pair iPhone at next visit
Mr. Jackson: 3-week follow-up visit

Tinnitus still just as bothersome when using hearing aids, even when volume turned to max
TSG helps some, but he is tired of listening to the same “droning” sound
His tinnitus always gets worse (louder) when he is in the courtroom
He continues to struggle hearing on his phone
Some days he likes to just listen to music, rather than listening to the TSG but doesn’t want to bother others or draw attention
Tinnitus is now noticeably worse when he removes hearing aids to go to bed

How can Aventa help?

- Activate modulation within TSG
- Reduce max volume
- Consider dB SPL adjustment
Beyond Aventa

Pair iPhone for direct streaming and app use

Let's see it in action!

Beyond Aventa

Download Smart app to allow for TSG adjustments in courtroom

Let's see it in action!
Beyond Aventa

Show him how to adjust for sound quality when streaming music

Beyond Aventa

Download Relief App for streaming while aided OR playing while unaided
Beyond Aventa

Pair iPhone for direct streaming and app use
Download Smart App, and adjust programming for courtroom
Show him how to adjust for sound quality when streaming music
Download Relief App for streaming while aided OR playing while unaided

Other suggestions?
Multi Mic for board room, court room?
Musician earplugs

Mrs. Hart

- January 2016: received call from Mr. Hart, not a current patient
- Upset because his wife, also not a current patient, had been re-admitted to psychiatric ward
- Being treated for chronic tinnitus, depression, generalized anxiety and suicidal tendencies
Mrs. Hart – History

- May 2014: tinnitus after cleaning ears with a water bulb system and cotton swabs.
- July 2014: purposely overdosed because of “high pitched ringing”, admitted for 5 days
- Tinnitus subsided, back to “old self”
- October 2015: Emotional distress from mother’s illness and increased workload
- Placed on Zoloft, Wellbutrin, Seraquil
- Resulting feelings: jittery, withdrawn, anxious, sleepless
- January 2016: no longer able to cope with tinnitus, readmitted

Mrs. Hart

- January 2016: Discussion and counseling with husband on initial phone call
- Sent tinnitus brochure to him
- Scheduled a consultation for after discharge
Mrs. Hart

- Seen after discharge
- “Crickets”
- “Swirling sand crystals”
- Fluctuating loudness from one day to the next
- Slight to mild SNHL
- Excellent word recognition
- Recommended a medication review with neuro-otologist at next week’s visit

Mrs. Hart

- February 2016: Returned, still on same meds
- Remained bothered by tinnitus
- Demoed LiNX² 961 RIEs in both ears
- TSG activated with no mic active
- Immediate relief
- Ordered her own pair!
Mrs. Hart

- March 2016: Fit with hearing aids
- TSG set to white noise
- Modified low freq filter for sound quality
- Added modulation per her preference
- Enabled TSG volume control + environmental steering due to daily differences

Mrs. Hart – 4 days later

- 4 days later: Emotional phone call from Mr. Hart
- Back to work
- Tinnitus is manageable
- Has ceased all medications
- 3 months later: Uses TSG daily and nightly
- Sleeping well
- Has "no problem" with tinnitus
Other materials to enhance tinnitus education

- Tinnitus Education Flipchart
- Patient’s Guide to Tinnitus Management
- Tinnitus Screening Tool
- Tinnitus Management Workbook

Mr. Guy

- Wearing ENZO² 588s in both ears
- Programmed with Nature Sounds
- Using Smart app
Mr. Guy – 2 week follow up

Loves hearing aids, iPhone streaming, and Smart app
Can’t find Nature Sounds on the Smart app in order to switch between them
Wishes Relief app had more musical sounds to incorporate
Tinnitus is even worse when he takes hearing aids out and tries to sleep at night

Questions:

Show me the problems on your Smart app
Show me the choices you see on the Relief app
What do you do to help you sleep?
Mr. Guy – 2 week follow up

Questions:
Show me the problems on your Smart app

Mr. Guy – 2 week follow up

Questions:
Show me the choices you see on the Relief app
Mr. Guy – 2 week follow up

Questions:
What do you do to help you sleep?

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Thank you!
What have you learned today?

Mr. Jackson  Mrs. Hart  Mr. Guy
Thank you!

Any questions?