

Hyperacusis Activities Treatment

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Overview

- Introductions
- Discuss experiences with hyperacusis
- Explain hearing, hearing loss and hyperacusis
- Review treatments for hyperacusis



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Education

- Knowledge is the first step to successful management of your hyperacusis
- How does hyperacusis affect you and in what environments it is most problematic?
- What strategies are effective for managing your hyperacusis?
- Be confident in communicating your needs to others



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What is hyperacusis?



- Reactions to moderately-loud sounds are too loud, annoying, fearful, and/or painful
- Affects 6-17% of general population
- Other terms that are used:
 - Misophonia
 - Select Sound Sensitivity
 - Decreased Sound Tolerance

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Types of hyperacusis

Loudness hyperacusis

Annoyance hyperacusis

Fear hyperacusis

Pain hyperacusis

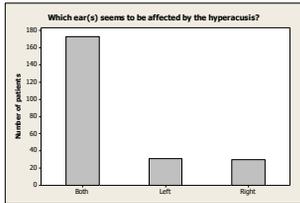
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Understanding your hyperacusis

- What is your hyperacusis experience?
- How long have you had hyperacusis?
- Does hyperacusis affect one or both ears?



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Your reactions to sounds

- Are there any sounds that are too loud?
- Are there any sounds that are annoying?
- Are there any sounds that cause fear?
- Are there any sounds that create pain?



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Your daily experience with hyperacusis

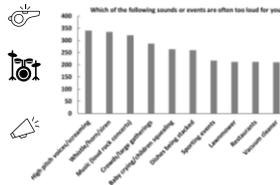
- Are there times during the day when you are particularly bothered?
- Are there times during the day when you are not bothered?
- How long do the episodes typically last after the triggering event?



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Common reactions to hyperacusis:
Loudness, annoyance, fear, and pain

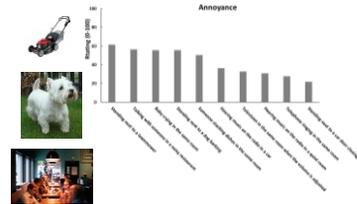
Sounds that are too loud



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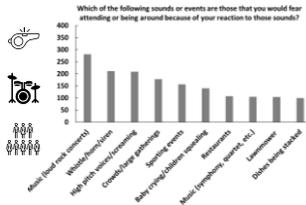
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Sounds that are annoying



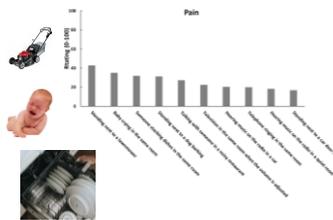
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Sounds that are fearful



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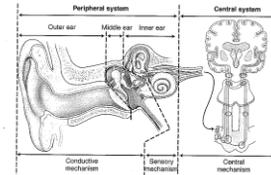
Sounds that cause pain



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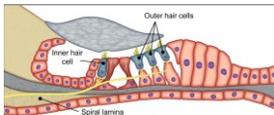
How do we hear?

The Human Auditory System:



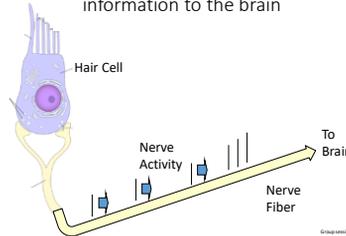
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Hair cells in cochlea



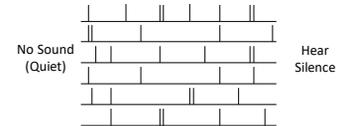
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The Auditory Nerve carries information to the brain



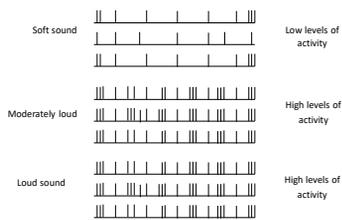
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Spontaneous Activity on Hearing Nerves

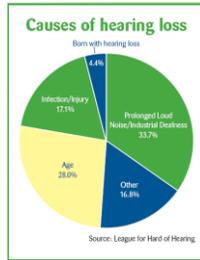


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Hyperacusis Nerve Activity



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There are many different causes of hyperacusis



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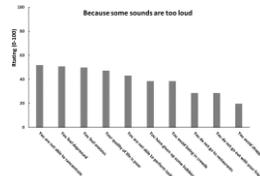
Reactions to hyperacusis (Tyler et al., 2014)

- Emotional well-being
- Hearing and communication
- Sleep
- Concentration



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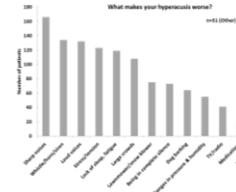
Common reactions to hyperacusis



- Affects concentration and focus, results in depression, anxiety, and poorer quality of life

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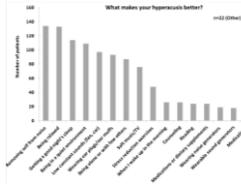
What makes hyperacusis worse?



- People have negative reactions to specific sounds and stress/tension worsened hyperacusis

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What makes hyperacusis better?



• Removing self from noise, being relaxed and in quiet are helpful in relieving hyperacusis

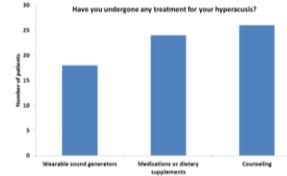
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Options to treat hyperacusis

- Counseling (Hyperacusis Activities Treatment)
- Ear plugs
- Sound therapy and hearing aids
- Relaxation exercises
- Medications

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How many people seek treatment for hyperacusis?



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Hearing protection

- Ear plugs reduce noise exposure
 - Wear in noisy environments
- Using ear plugs every day causes communication difficulties
- Ear plugs allow you to stay active, not be reclusive



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Sound Therapy

- Can be helpful for loudness and annoyance hyperacusis
- Options include non-wearable and ear-level sound generators
- Will take time for results



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Sound Therapy Options

- Non-wearable sound generators
 - Sound Pillow
 - Sound Generators
 - Smartphone Apps
 - CDs, radio, etc
- Wearable, ear-level sound generators

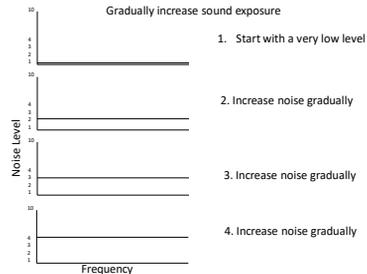


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How Sound Generators Help with Hyperacusis

- You hear low-level background noise
- Background noise is set low and has no emotional importance
- You can improve tolerance to sound by slowly turning up volume of noise

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Background sound partially masks a barking dog



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How hearing aids help with hyperacusis

- Make environmental sounds and speech audible
- Provides sound input to brain to improve loudness perception
- Facilitates better listening, and therefore, reduces effort and stress



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Hearing Aid Information

- Takes time to adjust to new sounds
- Set volume for soft sounds to comfortable level, but not for loud sounds
- Gradually increase gain overtime
- Audiologist uses an occluding mold to act like an earplug



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Deep breathing exercises

- Sit or lie flat in a comfortable position
- Put one hand on your belly just below your ribs and the other hand on your chest
- Take a **deep** breath in through your nose, and let your belly push your hand out
- **Breathe** out through pursed lips as if you were whistling
- Repeat 3 to 10 times



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Progressive Muscle Relaxation

- Learn to systematically tense and relax groups of muscles
- With practice, you will recognize a tensed muscle vs. a relaxed muscle
- This skill allows you to produce physical muscular relaxation at the first signs of tension



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Progressive Muscle Relaxation

Completed in two steps:

1. Deliberately apply tension to certain muscle groups
2. Stop the tension and focus on how the muscles feel as they relax

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Progressive Muscle Relaxation-Practice Exercise



1. Start with your arms
2. Make a fist and tense your arms for 15 seconds
3. Release the tension
4. Breathe deeply and pay attention to the sensation of your arms relaxing

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Practice Exercise--continued

5. Continue tensing and relaxing the following muscle groups:
 - Face
 - Shoulders
 - Stomach
 - Legs and feet
6. When finished, release any remaining tension in your body

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Visual Imagery

- Similar to daydreaming
- Attention is focused on some type of sensory experience
 - Creating novel mental images
 - Recalling past places and events



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Visual Imagery - Practice Exercise

1. Close your eyes
2. Think of a relaxing scene (the beach)
3. Try to imagine the scene as clearly as you can
4. The smell of the water, warm sand on feet, sound of ocean
5. Allow yourself to relax as you imagine the location in your mind

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Medications

- Currently no drug or surgery can reliably eliminate the source of hyperacusis
- There are effective drugs for:
 - Sleep, anxiety, and depression



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Questions?

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