Hyperacusis Activities Treatment

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Overview

• Introductions
• Discuss experiences with hyperacusis
• Explain hearing, hearing loss and hyperacusis
• Review treatments for hyperacusis
• 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
What is hyperacusis?

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

Loudness hyperacusis

Annoyance hyperacusis

Fear hyperacusis

Pain hyperacusis
Understanding your hyperacusis

• What is your hyperacusis experience?

• How long have you had hyperacusis?

• Does hyperacusis affect one or both ears?
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?
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?
How do we hear?

• The Human Auditory System:
Hair cells in cochlea
The Auditory Nerve carries information to the brain.
Spontaneous Activity on Hearing Nerves

No Sound (Quiet)

Hear Silence
Hyperacusis Nerve Activity

- **Soft sound**: High levels of activity
- **Moderately loud**: High levels of activity
- **Loud sound**: High levels of activity
Causes of hearing loss

- Born with hearing loss: 4.4%
- Infection/Injury: 17.1%
- Prolonged Loud Noise/Industrial Deafness: 33.7%
- Age: 28.0%
- Other: 16.8%

Source: League for Hard of Hearing
There are many different causes of hyperacusis

- Head Injury
- Bell’s palsy
- Migraine
- Meniere’s Disease
- Genetic disorders
- Noise
- Your Cause?
Reactions to hyperacusis
(Tyler et al., 2014)

• Emotional well-being
• Hearing and communication
• Sleep
• Concentration
Options to treat hyperacusis

• Counseling (Hyperacusis Activities Treatment)

• Ear plugs

• Sound therapy

• Relaxation exercises

• Medications
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
Sound Therapy

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

• Non-wearable sound generators
  • Sound Pillow
  • Sound Generators
  • Smartphone Apps
  • CDs, radio, etc

• Wearable, ear-level sound generators
Gradually increase sound exposure

1. Start with a very low level

2. Increase noise gradually

3. Increase noise gradually

4. Increase noise gradually
Background sound partially masks a barking dog
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
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
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
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
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
Visual Imagery

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

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