continued Conversations, The CEU Podcast: Hyperacusis Assessment and Management Presented by James W. Hall, III Copyright 2019

I. Hyperacusis is a Symptom Associated with a Variety of Disorders and Diseases:

- Developmental disorders in children, e.g., William's Syndrome and Autism
 Spectrum Disorder (ASD)
- Neurological disorders, e.g., multiple sclerosis
- Brain injuries, e.g., traumatic brain injury (TBI)
- Psychological disorders, e.g., depression
- Chronic pain disorders, e.g., Migraine and fibromyalgia
- Family history of sensory hypersensitivity (e.g., photic, tactile)
- Hearing related disorders, e.g., Tinnitus and auditory processing disorder (APD)

II. Short List of Typical Bothersome Sounds for Patients with Hyperacusis

- Sirens (e.g., ambulance, police, fire)
- Vacuum cleaner
- Hair dryer
- High pitch "shrill" sounds
- Loud telephone ring
- Power tools (e.g., saw, drill, or compressor)
- Young children crying or screaming
- Clattering dishes or pots/pans



III. To Manage or Not to Manage Hyperacusis? Six Questions to Ask

(Manage patients with one or more "Yes" answers)

- 1. Is hyperacusis a possible symptom of a disease or another disorder?
- 2. Is the hyperacusis disrupting the patient's important daily activities (e.g., school for children and work for adults)?
- 3. Does the patient avoid certain places because of hyperacusis (e.g., school, church, workplace, public places)?
- 4. Is the hyperacusis influencing the patient's quality of life?
- 5. Does the patient describe anxiety, fear, or depression because of the hyperacusis?
- 6. Does the patient have other sensitivities (e.g., light, touch, smell)?



IV. Hyperacusis Priority Setting Partnership Steering Group - Top Ten Research Priorities for Hyperacusis

- 1. What is the most effective treatment approach for hyperacusis in children?
- 2. What is the prevalence of hyperacusis in a general population and other special populations (e.g., people with autism, mental health issues, learning disabilities, or hearing loss)?
- 3. Are there different meaningful types of hyperacusis?
- 4. What is the essential knowledge and training required for health professionals to appropriately refer or effectively manage hyperacusis?
- 5. Which treatment approaches are most effective for different types or severities of hyperacusis?
- 6. Is hyperacusis due to physical or psychological issues or is it a combination of both?
- 7. Which psychological therapy (e.g., counseling, cognitive behavioral therapy, or mindfulness) is most effective for hyperacusis?
- 8. What management approach for hyperacusis is most effective for adults and children with autism?
- 9. What is the best way of using sound in therapy for hyperacusis?
- 10. Which self-help interventions are effective for hyperacusis?

Source: Fackrell, K., Stratmann, L., Gronlund, T.A., & Hoare, D.J. (2019). Top ten hyperacusis research priorities in the UK. *Lancet, 393*, 404-405.



V. Select References on Hyperacusis and Sound Tolerance Disorders

Aazh, H., Landgrebe, M., & Danesh, A.A. (2019). Parental mental illness in childhood as a risk factor for suicidal and self-harm ideations in adults seeking help for tinnitus and/or hyperacusis. In press. *American Journal of Audiology*.

Aazh, H., Langguth, B., & **D**anesh, A.A. (2018). Parental separation and parental mental health in childhood and tinnitus and hyperacusis disability in adulthood: a retrospective exploratory analysis. *Int J of Aud. Oct 1:1-6.* doi: 10.1080/14992027.2018.1514470. https://www.ncbi.nlm.nih.gov/pubmed/30272507

Aazh, H., Danesh, A.A., & Moore, B.C.J. (2018). Parental mental health in childhood as a risk factor for anxiety and depression among people seeking help for tinnitus and hyperacusis. *J of Am Acad Aud.* https://www.ncbi.nlm.nih.gov/pubmed/30446035

Andersson, G. (2013). The treatment of hyperacusis with cognitive behavioral therapy. ENT & Audiology News, 21, 86-87.

Auerbach B. (2019). Physiological mechanisms of hyperacusis: an update. ENT & audiology news, 27 (6), 48-51.

Baguley, D.M. (2003). Hyperacusis. Journal of the Royal Society of Medicine, 96, 582-585.

Baguley D.M. & Andersson. G (2007). Hyperacusis: mechanisms, diagnosis, and therapies. San Diego: Plural Publishing.

Fackrell, K., Potgeiter, I., Shekhawat, G.S., Baguley, D.M., Sereda, M., & Hoare, D.J. (2017). Clinical interventions for hyperacusis in adults: A scoping review to assess the current position and determine priorities for research. *BioMed Research International*, Article ID 2723715. Retrieved from: https://doi.org/10.1155/2017/2723715

Fackrell, K., Stratmann, L., Gronlund, T.A., & Hoare, D.J. (2019). Top ten hyperacusis research priorities in the UK. Lancet, 393, 404-405.

Fagelson, M. & Baguley, D.M. (eds.) (2019). Hyperacusis and disorders of sound tolerance. San Diego: Plural Publishing

Jastreboff, P., & Jastreboff, M. (2013). Using TRT to treat hyperacusis, misophonia and phonophobia. *ENT & Audiology News*, *21*, 88-90.

Jastreboff, P. & Jastreboff, M. (2014). Treatments for decreased sound tolerance (Hyperacusis and misophonia). *Seminars in Hearing*, *35*(2), 105-120.

Jüris, L., Andersson, G., Larsen, H.C., & Ekselius, L. (2014). Cognitive behaviour therapy for hyperacusis: a randomized controlled trial. *Behav Res Ther*, *54*, 30-37. doi:10.1016/j.brat.2014.01.001

Kennedy, V. & Benton, C. (2019). Sound sensitivity in children. ENT & audiology news, 27 (6), 61-62.

Pienkowski, M. (2018). Rationale and efficacy of sound therapies for tinnitus and hyperacusis. *Neuroscience*. pii: S0306-4522(18)30608- 0. doi: 10.1016/j.neuroscience.2018.09.012



V. Select References on Hyperacusis and Sound Tolerance Disorders (cont'd)

Pollard, B. Unravelling the mystery of hyperacusis with pain. ENT & audiology news, 27 (6), 52-53.

Rosing, S.N., Schmidt, J.H., Wedderkopp, N., & Baguley, D.M. (2016). Prevalence of tinnitus and hyperacusis in children and adolescents: A systematic review. *BMJ Open*, 6:e010596. doi:10.1136/bmjopen-2015-010596

Spankovich, C., & Hall, J.W. III. (2014). The misunderstood misophonia. Audiology Today, 26(4), 14 - 23.

Theodoroff, S. Untangling the emotional and physiological aspects of hyperacusis. ENT & audiology news, 27 (6), 54-55.

Twenge, J.M., Cooper, A.B., Joiner, T.E., Duffy, M.E., & Binau, S.G. (2019). Age, period, and cohort trends in mood disorder indicators and suicide-related outcomes in a nationally representative dataset, 2005-2017. *Journal of Abnormal Psychology, 128*, 185-199.

