



ZEN: THINKING OUTSIDE THE BOX CASE STUDY

Meryl Epstein, M.A.
Training Audiologist
Widex USA

TODAY'S AGENDA

- Review Zen and Fractal Tones
- Introduce Case Study
- Create a Treatment Plan
- Using Zen & WZT for Sleep Management, Relaxation and Concentration

AUDIOLOGY ONLINE ZEN AND TINNITUS COURSES BY WIDEX

Course # 22836
Tinnitus Management Fundamentals: Widex Zen Therapy I

Course # 22852
Managing Severe Tinnitus Cases: Widex Zen Therapy II

Course # 22850
Adding Tinnitus Management to Your Service Portfolio

Course # 17751
Effects of Musical Stimulation on Tinnitus & Relaxation

Course # 23021
Discussing WZT with Physicians: Solutions for Better Tinnitus Referrals.

Course # 23144
Managing Tinnitus without Hearing Loss and Unilateral Hearing Losses and Case Studies

Course # 23195 - Coming Next Month
Practical Applications of Zen – Making Zen Easy



ZEN FRACTAL TONES & NOISE

- Proven to enhance relaxation response
- Induces passive listening
- 5 Zen Tone options
- Zen noise/shaped noise option*
- Filters sounds in accordance with individuals hearing loss
- Combination unit
 - With or without amplification



UNIQUE BENEFITS OF ZEN FRACTAL TONES

- Widex' patented Fractal Technology
- Randomized tones based on the relaxing properties of music
- Music activates many structures of the brain
- Promotes passive listening
- Habituation
- **Zen has a calming rather than alerting effect**



BOTH AUDITORY STIMULATION AND STRESS MANAGEMENT CAN BE ADDRESSED

USING MUSIC FOR SOUND THERAPY

- Fractals are unique and offer greater benefit vs. Broadband Noise
- Music can affect physiological responses:
 - heart rate
 - blood pressure
 - respiration rate
 - muscle tension
 - skin temperature
 - skin conductance
 - tears
 - chills
 - release of hormones



ZEN: THINKING OUTSIDE THE BOX

How to implement ZEN for Sleep Management, Relaxation and Concentration



MEET ALAN



- 46 year old CEO
- Moderate CHL AU- Otosclerosis
- Long-Standing Mild Tinnitus
 - No negative reaction to tinnitus

ALAN'S LIFESTYLE

High level of stress at both work and home

- Perceived reduction of quality of life

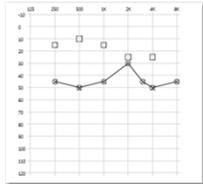
Often travels internationally for work with long flights

Difficulty falling asleep and concentrating due to anxiety

- Mental exhaustion & fatigue

AUDIOMETRIC RESULTS

Alan's most recent audiogram



- Long time hearing aid user
 - (5+ year old CICs)
- Decline in hearing
 - Been 3 years since last audiogram
 - Patient could not find the time to come in
- Struggling at work in meetings and social events.
- Reports some sensitivity to sound



MAKING A PLAN

Selection Considerations:

- Previous CIC wearer
- Cosmetic concern
- Ease of use for phone



CONSIDERING LIFESTYLE AND LISTENING NEEDS



SENSITIVITY TO SOUND




WHAT DID WE FIT ALAN WITH?

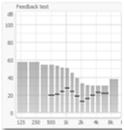
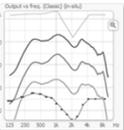




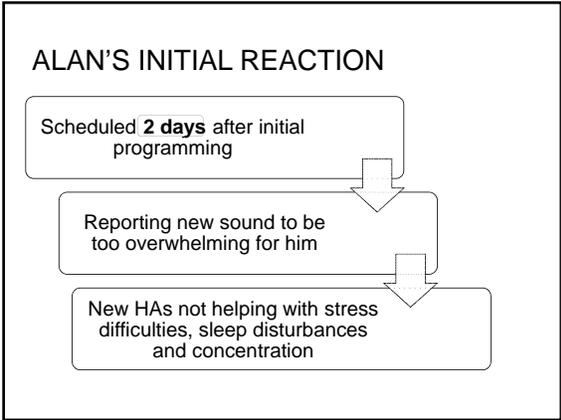


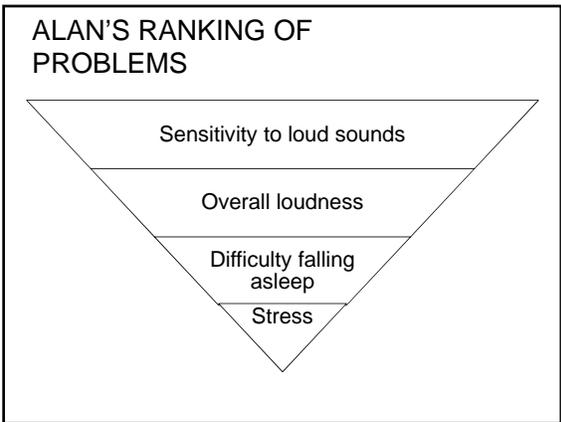

ALAN'S FIRST FITTING



COMPASS™ GPS Master Program at Target
FITTING SIMPLIFIED







WHAT'S THE NEXT STEP?

ADDRESSING ALAN'S NEEDS



- Counsel on short use of new technology and adjustment period
- Fine tuning considerations:
 - Acclimatization setting
 - Increase TruSound Softener PLUS
 - RC Dex for control
- Address stress, concentration and sleep management



GPS FINE TUNING

ACCLIMATIZATION





GPS FINE TUNING

TruSound Softener Plus





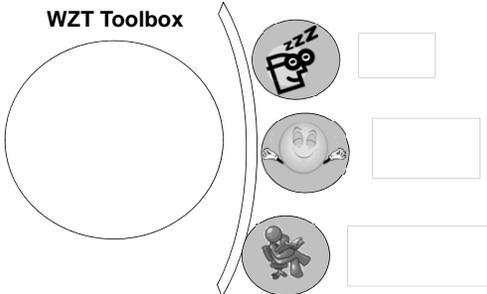
USING WZT & ZEN FOR SLEEP AND STRESS MANAGEMENT



WIDEX
HEAR INTERNATIONAL

WHICH COMPONENTS OF WZT WILL ALAN NEED?

WZT Toolbox



WIDEX
HEAR INTERNATIONAL



SETTING UP A SLEEP PROGRAM



PROGRAMMING ZEN 3 SIMPLE STEPS

1. Feedback Test 2. Sensogram 3. Zen+ in Smart Toggle

BASIC ZEN+ SETTINGS

CHANGING ZEN STYLES

- Have patient listen to all Zen styles for 30 seconds each.
- Rate accordingly

Zen style	Tinnitus Awareness Score	Relaxation Score
Aqua		
Coral		
Lavender		
Green		
Sand		
Noise		

SETTING A ZEN SLEEP PROGRAM

Step 2: ~~Set the microphone Zen option~~



Part 1:
Create a Relaxing Setting Without Amplification

MAKING A SLEEP SETTING

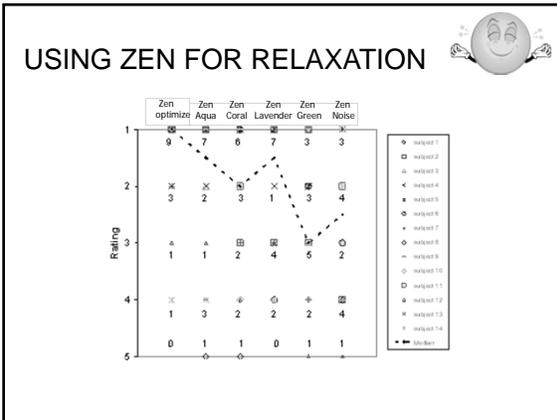
Part 2: Set Limited Play Time



WIDEX
HIGH DEFINITION HEARING



Zen for Relaxation & Stress Management



ARTICLES ON ZEN

- Kuk, F., & Peeters, H. (2008). *The hearing aid as a music synthesizer*. Hearing Review, volume 15 number 11
- Sweetow, R.W., Henderson, S.J. (2010). *Effects of acoustical stimuli delivered through hearing aids on tinnitus*. Journal of the American Academy of Audiology, 21(7), 461-473.
- Kuk, F., Peeters, H. & Lau, C. (2010). *The efficacy of fractal music employed in hearing aids for tinnitus management*. Hearing review, 17(10).
- Herzfeld, M., Kuk, F. (2011). *A Clinician's Experience with Using Fractal Music for Tinnitus Management*. Hearing review, 18(11).
- Widex Press about Zen: No. 27, 28 and 32
- Sekiya, Y., Takahashi, M., et al. (2013) *Using Fractal Music as Sound Therapy in TRT Treatment*. Audiology Online

PROGRAMMING ZEN FOR RELAXATION

HAVE THE PATIENT CHOOSE A ZEN STYLE OF THEIR CHOICE FOR RELAXATION

IF PATIENT NEEDS A RELAXATION PROGRAM

Option 1: Deactivate Microphone

Patient needs a relaxation program



RELAXATION + AMPLIFICATION

Option 2: Select patient-preferred Zen and keep amplification on

- 1 • Zen tones should be audible, but relatively soft
- 2 • Zen tones should not interfere with conversational speech
- 3 • Zen tone volume is sufficient to just begin to decrease stress

WZT RELAXATION STRATEGIES

- Stress Reduction
 - Progressive muscle relaxation
 - Deep breathing
 - Guided imagery
- Sleep improvement techniques



PROGRESSIVE MUSCLE RELAXATION



- Tense each individual muscle group while inhaling
- Tense as hard as you can for 8 seconds
- Release the muscles as you exhale
- Progress to the next muscle area



DEEP BREATHING



- Exhale completely through your mouth
- Inhale through nose for 4 seconds
- Exhale through mouth for 6-8 seconds
- Repeat cycle



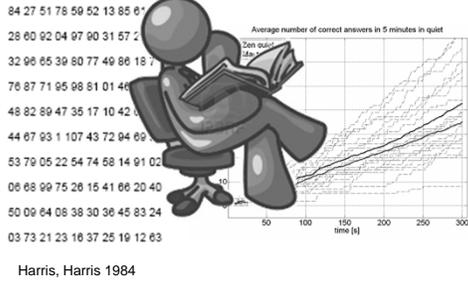
GUIDED IMAGERY



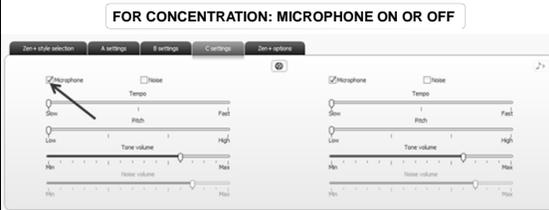
- While doing deep breathing exercises:
 - Close your eyes
 - Imagine yourself in a relaxing environment
- Can use WZT relaxation CD or printed materials



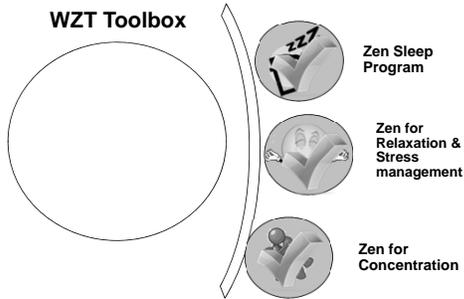
DOES ZEN IMPROVE CONCENTRATION?



PROGRAMMING ZEN FOR CONCENTRATION PROGRAM



DID WE MEET ALAN'S NEEDS?



ALAN'S OUTCOME

BEFORE

AFTER

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SUMMARY

Widex Zen Therapy

- An easy and effective solution
- Can be used to help those who have difficulty with concentration, stress and sleep management
- Complete portfolio of tools and materials to help with even severe tinnitus cases.

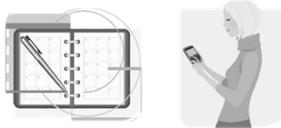
ZEN AVAILABILITY

<p>WIDEX DREAM™</p> <ul style="list-style-type: none"> ■ 440 Shaped Noise ■ 330 ■ 220 ■ 110 <p>WIDEX CLEAR™</p> <ul style="list-style-type: none"> ■ 440 ■ 330 ■ 220* <p>WIDEX ZEN™</p>	<p>WIDEX SUPER™</p> <ul style="list-style-type: none"> ■ 440 ■ 220* <p>widex mind™</p> <ul style="list-style-type: none"> ■ 440 ■ 330* ■ 220* <p>WIDEX MENU™</p> <ul style="list-style-type: none"> ■ 10* ■ 5* ■ 3* <p><small>*Must order with Zen</small></p>
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LIVE AUDIOLOGY ONLINE ZEN EVENTS

Join us for more "Zen Talk"

- Zen talk – every second Tuesday at 12 noon Eastern time.
Remember to put it on your calendar!



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THANK YOU

FOR ADDITIONAL QUESTIONS,
PLEASE CONTACT AOINQUIRY@WIDEX.COM
OR CALL WIDEX AT 1-800-221-0188
