VRT: Neuroplasticity & Exercises that Connect it to Everyday Life

These are some of the questions from the 2026 Life Rebalanced Live virtual conference, answered by VeDA volunteers who are vestibular healthcare professionals. Disclaimer: This is not intended as medical advice. Please talk to your healthcare provider before making changes to your treatment plan.

Q: What are the test tips for retraining my brain? Ideas on how to continue to improve and gradually increase endurance for shopping, cleaning, and life! I love that our body is always learning; it's just so easy to restrict and stop pushing oneself when struggling with daily dizziness and vertigo.

I am one of the moderators for today's Q&A, and also a long-time vestibular therapist and coach. I agree with Mary's comment about guidance from a trained therapist. A coach can provide this support as well. Mindset work can also help to be able to continue to do things that feel a little scary or hard., Sarah Conover PT, MHPT, CHC

Q: Progress is SO SLOW...how do I know when I'm building neuroplastic change versus plateauing?

A: Measuring a patient's report of their status and also measuring objectively can help a clinician give feedback to a patient to validate their progress. And you are always having neuroplasticity. It never stops., Sarah Conover PT, MHPT, CHC

Q: What is the best frequency for doing vestibular exercises at home? I try to do some balance exercises every day (standing on one leg, etc.) and then do the full routine that my PT gave me 1x/week. Is that enough to maintain function?

A: The short answer is, it depends. The frequency and duration of vestibular and balance exercises are what we commonly call the "dose". In addition to the type of exercises given, we look carefully at the "dose" for each patient. Just like in medicine, the right medication given in the wrong dose can either be ineffective or harmful. Usually, the rule of thumb for dosing that I use is simply put, "challenging but doable." That can mean a lot of different things. Also, sometimes after a time of doing the same home program, the dose or even the type of exercises that are optimal can change. It also depends on what else you are doing - what is the overall level of activity? People get some amount of vestibular training by doing functional everyday things as well. Maybe it's a good time to reach back out to your PT, Sarah Conover PT, MHPT, CHC

Q: Can Xanax use impact neuroplasticity, causing issues with compensation after vestibular loss? I was on Xanax before my vestibular issues for sleep, and stayed on it throughout my VT. I want to understand if it could be impacting my compensation.

A: Medications can have a role in helping or hindering. Medications are a tool. Sometimes it's long-term, sometimes it's short-term. It's very individualized. It's only one tool among many tools. We do not want to over-reliance on them or use them to mask. , Sarah Conover PT, MHPT, CHC

Q: Do you think visualizations are an important tool for the brain to retrain itself to do things that you have not done in your healing journey, or that you have avoided because of the unknown?

A: I often use visualization and other mindfulness practices when I work with patients. Belief matters. Choice matters. When we believe and want to do something, it works better., Sarah Conover PT, MHPT, CHC

Q: So far, I haven't seen much on vestibular dysfunctions, treatment, and success in the elderly. Is recovery slower or even possible?

A: Elderly brains have been studied, and there is strong evidence that neuroplasticity continues as we age. That being said, as we age, our vision and other systems can decline in function and therefore the resources someone who is elderly might be different and slow down neuroplasticity., Sarah Conover PT, MHPT, CHC

Q: Are there pros and cons to the use of virtual reality for vestibular therapy?

A: It is another tool, but holds no inherent value over other methods., Anthony Veglia, DPT

If it makes you do your exercises more consistently because you find it enjoyable, then it could be helpful., Cynthia Ryan

Q: At my final VRT appointment, I got sent home with a home exercise program. It seems like I've gotten to a plateau. If I do more, it gets me more sensitive to visual and auditory input. Can you help me understand this?

A: It sounds like it's a dosing situation. What I mean by dose is the intensity, reps, duration, and frequency of the program. Sometimes there is a really fine line between "not enough" and "too much". It's not unusual that people hit plateaus. And sometimes the solution is a new exercise, or a change of dose of the current one. Sometimes the mind can help create resistance to an exercise as well. I have had that happen with patients, and when we make a change in the actual type of exercise, there can be a breakthrough. I would absolutely reach out to your PT and discuss this with them. , Sarah Conover PT, MHPT, CHC

Q: What factors determine whether vision issues are best addressed via vestibular therapy or vision therapy?

A: This depends on things like the nature of the vision issue and the experience and skill level of the vestibular PT, as will as the optometrist. , Sarah Conover PT, MHPT, CHC

Learn more about vision and vestibular issues here: https://vestibular.org/article/diagnosis-treatment/vision-hearing/, Cynthia Ryan

Q: How do vestibular therapists determine when to work on vision versus balance?

A: I've had some therapists say they like to work on other modalities and incorporate vision last (such as by initially having eyes closed during some exercises). We have guidelines and research that can help guide our vestibular therapy practices. Like so many other areas of medicine, you might get several different approaches from several highly expert providers, even for the same thing. As PTs, in our standards of practice, we must do a thorough exam and assessment, determine any diagnoses that we can make, list problems and goals, and make a plan to address those issues. Based on the differing experiences of therapists, their approaches might vary, especially about what order to address the various aspects of a case. My advice to you is to be curious and ask your providers to explain the why behind their approaches, so you can better understand. And if it doesn't make sense to you, definitely ask!, Sarah Conover PT, MHPT, CHC

Q: I am keen to learn which medications people have tried and had success with. I am 3 years in, and nothing has helped. Thank you

A: Here is an article about medications that might be helpful to you: https://vestibular.org/article/diagnosis-treatment/treatments/medication/., Cynthia Ryan

Q: I have neuropathy in one leg/foot, loss of one vestibular balance nerve, and macular degeneration. The neurologist says there is not enough data for my brain to stay balanced. Can my brain relearn to balance with less data?

A: Absolutely, yes! That's really what most of vestibular rehab is about! I've had patients with diabetic retinopathy, diabetic neuropathy, and diabetic vestibulopathy, affecting all the major balance at once, and improvement is still very possible! The biggest factors are repetitively challenging the brain in areas of balance, and TIME, Anthony Veglia, DPT

Q: Is refractory BPPV a lifetime diagnosis? Any home therapies for making those crystals reattach to the canal?

A: Refractory BPPV is not incurable. I've treated many, many patients with BPPV, and in the cases of stubborn crystals, trying a variety of small-angle adjustments in maneuvers, as well as much longer periods of waiting in each position, can be the key to finally getting it resolved. It's not fun, but it is treatable, Anthony Veglia, DPT

Q: What does the latest research show regarding neuroplasticity and how it can rewire the brain to overcome chronic dizziness? How can neuroplasticity be initiated daily to create new neural pathways?

A: Here is a helpful article that discusses neuroplasticity: https://vestibular.org/blog/neuroplasticity-for-persistent-vertigo-and-tinnitus/, Cynthia Ryan

Neuroplasticity is connecting and reinforcing connections in the nervous system. We are all always doing neuroplasticity, either reinforcing old connections/wiring or forming new ones. , Sarah Conover PT, MHPT, CHC

Q: My PT & neurologist stopped VRT until my migraines were "under control". I've never accomplished this, and years have gone by. Is VRT just not good for some patients?

A: VRT is completely possible for most people with VM, but it has to be an appropriate intensity - or "dose". VRT is more than just exercises, but education, and nervous system regulation, and can actually help the migraines to "get under control" if done by an experienced provider. , Sarah Conover PT, MHPT, CHC

Q: Can you offer any recommendations for PPPD patients who've reached a VRT plateau after 7 months of therapy (consistent VRT exercises, CBT, and low-dose meds)?

A: Those really are the big hallmarks of PPPD treatment, so at this point, trying small variations in VRT exercises for their novelty to the brain, as well as small dosage adjustments, could be the bump to get over the hill, Anthony Veglia, DPT

Q: My otoneurologist told me that VRT does not help Meniere's disease. Is that your understanding?

A: VRT is more than just exercises, and can absolutely help someone with Meniere's. There is a lot of education and other training that is not just related to exercises, that can help improve life for someone with MD., Sarah Conover PT, MHPT, CHC

Q: Do you have to keep doing your VRT exercises for the rest of your life?

A: It depends. You want to check in with your vestibular therapist. And if you don't have one, consider seeing one. I always recommend to my patients that they do a

"tune-up" with their therapist regularly, usually every 6-12 months. , Sarah Conover PT, MHPT, CHC

Q: I'm curious about VRT options or where to look. All I ever get from my managed care providers is "Have you tried the Epley?" (This includes the ENT who diagnosed VM during chronic vertigo in recent years. My BPPV dates back decades.) I had a PT who did Epley over and over and said yeah, this isn't really sticking. It's frustrating.

A: Seeing a specialist who knows more than just BPPV is a big deal. On VeDA's website, they have a Find A Clinician tab for someone in your area: https://vestibular.org/healthcare-directory/, Anthony Veglia, DPT

Q: Do all of these therapies work for folks who have had brain injuries/operations wherein the vestibular function is damaged?

A: Yes, indeed! My patients have had vestibular insults from all sorts of different causes, but the principles are still the same., Anthony Veglia, DPT

Here is an article about TBI and vestibular disorders: https://vestibular.org/article/diagnosis-treatment/types-of-vestibular-disorders/tbi/., Cynthia Ryan

Q: Is it normal to have chronic fatigue as part of the baseline with vestibular disorders, even with all the treatment/therapy?

A: Yes. Fatigue is common as the brain is suddenly having to put effort into so many tasks that were completely automatic beforehand. It does definitely get better with time and rehab., Anthony Veglia, DPT

Q: Is there a list of (all possible) VRT methods? I live in a country where the topic is not well understood, and I do not know which services to look for, or if there's more than what I have already tried.

A: Vestibular rehab is tricky to create a single list for, as there are an infinite number of needs for any specific patient.

However, there are four categories:

1. Adaptation deals with VOR dysfunction, where the eyes fail to keep up with head movement as a result of ear dysfunction.
2. Substitution deals with isolating different balance senses, like closing the eyes or standing on uneven terrain, to challenge the remaining senses.
3. Habituation is the largest category, and really just involves taking ANY activity that bothers one's symptoms, and repeating that task to build up a higher tolerance for it.
4. Lastly, there are canalith repositioning maneuvers to treat BPPV.

Anthony Veglia, DPT

Q: The hardest part of VRT for me is just trying to secure an appointment. When you are having a spell, it takes a while to get to the doctor, who then has to send a referral for VRT. Then it takes them a while to get you in as a patient - often 1-2 months. It is so depressing and daunting.

A: It can be a challenge with so many dizzy folks out there, but so few of us who specialize in treatment. A big focus for me is to create homework that needs the fewest visits possible to allow people to improve outside of the clinic., Anthony Veglia, DPT

Q: I have congenital ocular motor nerve palsy and vestibular migraine- how do I know what parts can change?
A: Vestibular migraine has many variable aspects that change over time with age,

stress, environmental factors, sleep, and, of course, treatments. A cranial nerve III palsy, if a complete palsy, will not change. There are strabismus surgeries with an ophthalmologist, so a consult is recommended., Anthony Veglia, DPT