**Vestibular Case E**

A female patient, 33-years-old, comes to the practice with unclear dizziness. She had BPPV (right side) 3 years ago. The ENT doctors explain that now everything is ok. Friends told her that the neck often causes dizziness, and that chiropractors and osteopaths could treat this very well (this is taking place in Germany…). Therefore, she was treated first by a chiropractor and also later by an osteopath several times/months. She finished both therapies without success. Then followed homeopathy, acupuncture and hypnotherapy. All without success. She found you on the internet and now you are her last hope, she says!

You ask more questions about the dizziness. Your patient answers the following:

* The dizziness is constant. When she lies down, she feels as if she is lying on a waterbed.
* When she walks, everything is ok, her vision is clear. Only sometimes, when she looks to the right while walking, and only when she looks to the right, she feels like the world is tilting around her.
* She has also noticed that she can no longer look at patterned, moving surfaces. It creates a swaying sensation, and she has to lean against a wall immediately.
* She completes the GAD-7, she scores 18 points.

You do your physical examination afterwards; these are your findings:

* Cerebral examination, oculomotor examination, HIT and DVA normal.
* The mCTSIB is negative, but you notice that she sways less when she moves her head and stands on the mat.
* FGA: the patient manages all items and item 7 & 8 without any problems. She says that is because she practices a lot. On item 3 she also has no problems and on item 4 she only loses her balance when she turns her head to the right.

At the next appointment you decide to do the MSQ and VVAS as well:

* MSQ (page 2 of the document “[Daily exercise program – Habituation Therapy](https://study.physiotutors.com/wp-content/uploads/2020/04/Daily-exercise-program-Habituation-Therapy.pdf)“) – Turning to the right in stand (item 5), is horrible for the patient. Turning to the left does not cause any problems. Turning in lying position (item 1) does not cause any problems either, she only has ‘the waterbed dizziness’ in lying position.
* VVAS (page 2 the document “[Habituation therapy for visual vertigo – Videos](https://study.physiotutors.com/wp-content/uploads/2020/04/Habituation-therapy-for-visual-vertigo-Videos.pdf)“) – Being a passenger in a car 3, fluorescent lights 3, traffic at a busy intersection 3, walking through a mall/supermarket 10, riding an escalator 5, watching a movie in a theater 2, walking across a patterned floor 3, watching an action movie 2.
1. What is your hypothesis? What does she have? Why do you think that?
2. Develop a treatment plan that includes an intervention for all symptoms / problems!
3. How would you evaluate the progress of your treatment?

1. She has PPPD. Constant dizziness. Tried everything. Can’t look at moving surfaces. Can score better in complicated tasks. MSQ is “positive”, and also VVAS.

2. Treatment plan:

 - patient education.

 - Vestibular rehabilitation. If I can provoke the symptoms with specific movements and visal stimuli, I would do habituation therapy. I can use the same document for vestibular migraine (habitutation therapy for motion-induced dizziness and habituation therapy for visually induced dizziness). I would also do relexation techniques. Balance exercises is also good.

 - Cognitive behavorial therapy.

 - Medications. Selective serotonin reuptake inhibitors (SSRI) and serotonin-norepinephrine reuptake inhibitors (SNRI) are commonly recommended for chronic functional dizziness with and without psychiatric comorbidity. Antihistamines and benzodiazepines can be expected to delay rather than help rehabilitation and should be avoided if possible.

3. I would re-test the positive tests, and ask for how is it going, and compare to the first time I saw the patient.