

### **Dizziness/Vertigo Scenario:**

A 42-year-old male has come to urgent care with dizziness. The triage staff/nurse wrote “feeling oozy” on the chart.

Using the Epi-logical approach, what should be the probable diagnoses?

First, the patient’s chief complaint must be clarified. When asked to describe his symptom, the patient states that he feels his head has been spinning. The patient is accompanied by his wife, who states that he could not drive due to his constant feeling. Based upon this, the patient has vertigo. All differentials on the mind map must be considered, with acknowledgment that a cerebrovascular accident is less likely in this age group. Likewise, benign positional vertigo (BPV) may not be very likely because usually patients with BPV has very brief (lasting seconds) episodes of vertigo which last frequently. Nonetheless, because of the high frequency of these episodes, some patients describe these as constant.

How should a clinician address urgent/emergent situations?

The patient’s vitals include BP 144/80, HR 76, T 98F, O2sat 100% and his BMI is 26. The patient appears to be slightly anxious, he is not in acute distress, his face is symmetrical, and his speech is coherent and comprehensible. Based upon this information, most likely an urgent/emergent situation does not exist, but the clinician can continue to watch for any neurological deficit during the course of the evaluation.

Weighing and Removing Anchor Bias:

<b>The Clinician’s Questions</b>	<b>The Patient’s Responses</b>	<b>How does this information help with the weighing process?</b>
I am sorry to hear about you not feeling well. So, do you actually have a spinning sensation in your head?	Yes, I feel that either my head or the room is spinning.	The patient has vertigo.
When do you think this started, and is it occurring as attacks or episodes where spinning comes and goes, or is it constant? <i>(Some patients may not follow this question, especially if they have vertigo at the time. So the question may need to be rephrased)</i>	Gee, let me think. Not sure. I just have been feeling this way since this morning. I could hardly get out of bed and could not do anything. So, I guess it is constant.	Meniere’s disease, vestibular neuritis and acoustic neuroma are likely. Vestibular migraine and a cerebrovascular accident are also somewhat likely, although usually patients present with headache as chief complaint in the case of vestibular migraine and the clinician noted that the patient’s age places him at low risk for a cerebrovascular accident. BPV is likely only if the patient is not remembering the timing about his vertigo. BPV is supposed to last seconds, so a description of continuous

		vertigo for several hours is not consistent with BPV. MS is unlikely due to gender, and previous neurological symptoms will need to be explored to consider this.
Is there something that brings it on?	Every time I turn my head, I feel it, and it stays there until I become still. It never really stops.	BPV is unlikely. Meniere's disease, vestibular neuritis, and acoustic neuroma are still likely.
Ok. Do you have any ringing in your ears, or problems with hearing?	Not yet.	Meniere's disease is unlikely. Vestibular neuritis and acoustic neuroma are still likely, although in acoustic neuroma, hearing loss must be present and symptoms should be more chronic, but it could be the early stage of the disease.
Do you have any headache?	No headache, but this is bothering me, and because I can't turn my head, my neck is getting stiff from being in the same position.	Vestibular migraine is unlikely.
Do you recall from last week or a few days ago if you had any stomach virus or upper respiratory illness?	I was sick last week with a bad stomach virus, and I couldn't go to work for 4 days. I got better, but now this has come on.	Vestibular neuritis (also known as labyrinthitis) is likely.
Has it ever happened before in the past?	No, I have never had it happen.	BPV and Meniere's disease are unlikely, unless these are first episodes.
At this point, the clinician has sufficient evidence for vestibular neuritis. There is some suspicion for acoustic neuroma, assuming his stomach virus was co-incidental. The clinician should ask additional questions and remove anchor bias.		
Do you take any medications?	I take a blood pressure medicine and an asthma inhaler.	Medications are not contributory to his illness, unless he is taking a loop diuretic.
What blood pressure medicine?	Beta blocker	Not contributory.
Do you have any other medical illness?	No, I am really healthy otherwise. My cholesterol is up, but I am watching my diet.	Not contributory.

Do you have any blurry vision, weakness, numbness, or tingling in any part of your body?	No, I haven't noticed.	Cerebrovascular pathology is unlikely.
The clinician should do a physical exam.		
HINTS	Abnormal head impulse on the right side, horizontal, unidirectional nystagmus, and no skew deviation.	A peripheral pathology is on the right side.
Nervous system	Alert, oriented X 3. Cranial nerves – partially examined due to symptoms and intact. Motor and sensory systems examined partially and intact.	A central nervous system pathology is most likely absent
Hearing test	Normal Rinne and Weber bilaterally	Acoustic neuroma is unlikely, because even if the patient did not have a subjective hearing loss, an objective test should have picked up on a subtle deficit, which should be present by the time additional symptoms, such as vertigo arise.

Based upon the evaluation, the index of suspicion is highest for vestibular neuritis, and although quite bothersome, it is a self-limiting condition. There is no lab or imaging to confirm this diagnosis. The disappearance of symptoms in a few days confirms the diagnosis.