**Identifying Data:**

Full Name: G.B.

DOB: 10/09/1992

Date & Time: 04:30PM on 10/24/2022

Location: Astoria, NY

Race/Nationality: Caucasian

Marital Status: Single

Religion: unknown

Source of Information: Self

Reliability: Reliable

Source of Referral: Self

Transportation: Ambulated to clinic from home

**Chief Complaint:** episodes of severe dizziness x2 weeks

**History of Present Illness:**

30 y/o male, no significant PMHx, presents with complaints of intermittent dizziness described as the room spinning, associated with nausea, mild 3/10 headache, and gait instability that first began 2 weeks prior that lasts approximately 10-15 minutes and then resolves spontaneously. In total, he has had one episode during the day while at work, two episodes before bed while laying down, and one episode that woke him up in the middle of the night. These episodes cause him to sit on the ground because he feels he will fall if he walks. He rates the dizziness as a 10/10 discomfort when it occurs. The dizziness is not associated with positioning. He was seen at this clinic one week prior and given Meclizine 12.5mg for BPPV which he states has been taking daily at nighttime but it has been ineffective in managing his symptoms. Admits to decreased oral intake of food and liquid less often attributed with 5 lb. weight loss over last month which he attributes to recent stress of starting a new company. Denies hearing loss, tinnitus, lightheadedness, ataxia/impaired balance, feeling of passing out/LOC, seizure, confusion, generalized weakness, palpitations, chest pain, SOB, vomiting, visual changes, abdominal pain, bleeding, shaking/increased perspiration, recent illness or recent travel

**Past Medical History:**

* Denies
* *Hospitalizations*
  + Denies prior hospitalizations
* Up-to-date on immunizations
* Vaccinated against SARS-CoV-2 – Pfizer & Moderna x3
* Influenza vaccine 2022

**Past Surgical History:**

* Denies

**Medications:**

* None reported

**Allergies:**

* NKDA, food or environmental allergies

**Family History:**

* Mother – living, 58 y/o, healthy
* Father – living 61 y/o, healthy
* Siblings – none
  + Maternal grandfather deceased of MI at 74. Otherwise, no reported FMHx of neurologic, metabolic, or cardiovascular disease.

**Social History:**

* Habits – Drinks socially on average 2-3 drinks per weekend. Denies tobacco, marijuana or other illicit substance use. Drinks 1 cup of coffee each morning.
* Travel – no recent travel
* Occupation – Business owner. Recently opened clothing store.
* Social/marital History – Single, sees friends on weekend. No one else he is in contact with has similar symptoms.
* Diet – States his appetite is unchanged but he has been skipping meals lately due to forgetting to eat which he attributes to the stress of his new job.
* Sleeping 4-6 hours/night, does not feel well rested. Denies snoring.
* Exercise – Does not exercise regularly but walks 1+ miles daily commuting to work/while at work.
* Safety measures – Wearing a seatbelt while in motorvehicle.
* Sexual History – Not currently sexually active. Two male sex partners in past year. Uses condoms as barrier method. Last STI screening 2 months prior with no abnormal findings per patient.

**Review of Systems:**

* General
* **Admits to weight loss (with attributable factor)**
* Denies generalized weakness/fatigue, recent weight gain, loss of appetite, fever/chills/night sweats
* Skin, hair, nails
* Denies excessive sweating, pigmentations, moles, change in hair distribution, pruritis, xerosis
* Head
* **Admits to headache and dizziness**
* Denies recent head trauma or history of head trauma
* Eyes
* **Denies visual disturbances**, abnormal lacrimation, photophobia, pruritis
* Last eye exam 1 yr prior (No change in vision). Reported acuity 20/20
* Ears
* **Denies decreased hearing, tinnitus**, pain, discharge, or feeling of fullness
* Nose/Sinuses
* Denies congestion and nasal discharge or epistaxis
* Mouth and Throat
* Denies bleeding gums, sore tongue/throat, mouth ulcers, voice changes, or dentures. Last dental exam 1 year prior, no cavities.
* Neck
* **Denies swelling/lumps, stiffness**, or decreased ROM
* Pulmonary System
* **Denies SOB**, DOE, cough, wheezing, hemoptysis, cyanosis, orthopnea, or PND
* Cardiovascular System
* **Denies known murmur, chest pain, palpitations, irregular heartbeat, edema/swelling of ankles/feet, or syncope**
* Gastrointestinal System
* **Admits to nausea**
* Denies changes in appetite, intolerance to specific foods, N/D, dysphagia, pyrosis, flatulence, abdominal pain, jaundice, changes in bowel habits, hemorrhoids, constipation, rectal bleeding/blood in stool, or constipation. No prior colonoscopy.
* Genitourinary System
* Denies changes in frequency, nocturia, urgency, oliguria, polyuria, dysuria, abnormal color of urine, incontinence, or flank pain
* Sexual History – refer to Social Hx
* Nervous System
* **Admits to gait instability when episodes of vertigo occur**
* **Denies seizures, headache, loss of consciousness, sensory disturbances, loss of strength, change in cognition/mental status/memory, or weakness**
* Musculoskeletal System
* Denies muscle/joint pain, deformity, swelling, redness
* Peripheral Vascular System
* Denies intermittent claudication, coldness/trophic changes, varicose veins, peripheral edema, or color change
* Hematologic System
* Denies anemia, easy bruising/bleeding, lymph node enlargement, prior blood transfusions, or history of DVT/PE
* Endocrine System
* **Denies polyuria/polydipsia/polyphagia, heat/cold intolerance, goiter, excessive sweating, or hirsutism**
* Psychiatric
* Denies depression/sadness, anxiety, or obsessive/compulsive disorder. Never seen a mental health professional. Never taken psychiatric medications.

**PHYSICAL EXAM**

Vital Signs:

BP: 124/78 mmHg – sitting & supine, L arm

RR: 14 breaths/min, unlabored

Pulse: 78 bpm, regular

T: 98.6F (oral)

O2 SAT: 100% room air

Height: 72 inches Weight: 149 lbs BMI: 20.2

General Appearance: alert, oriented, not distressed, appropriate development, well nourished, appropriate posture, appears stated age, well dressed. **Appears pale**

Head: normocephalic, atraumatic

Eyes: Symmetrical OU. No strabismus/exophthalmos/ptosis. Sclera white, cornea clear, conjunctiva pink. No erythema of lacrimal sac. PERRLA. EOM intact with no nystagmus. Red reflex intact OU. Retinal vessels unremarkable (no AV nicking, hemorrhages, exudates, or neovascularization). Optic disc unremarkable (cup-to-disc ratio < 0.5 OU with appropriate color & contour), no papilledema.

Ear: Appropriate in size. Ear and tragus nontender AU. No lesions/masses/trauma visualized on external ear. No discharge/foreign bodies in external auditory canals AU. TM pearly white/intact with cone of light in appropriate position AU. Non-obstructing cerumen noted in the ears bilaterally.

**Dix-pallpike: no rotary nystagmus noted**

**HINTS exam to evaluate vestibulo-ocular reflex deferred because patient was not actively experiencing vertigo at the time of the examination.**

Nose: Symmetrical, no masses/lesions/deformities/trauma/discharge. No tenderness/bogginess/step off to palpation. Nares patent bilaterally. Nasal mucosa pink & moist. Septum midline. **I**No ulcerations/foreign bodies visualized.

Sinuses: No tenderness to palpation over bilateral maxillary/frontal sinuses.

Mouth & Throat:

Lips: Pink & moist. No cyanosis, lesions, or ulcerations

Oral Mucosa: Pink, well hydrated. No masses/lesions noted. No leukoplakia.

Palate: Pink, well hydrated. No visible lesions/masses/scars.

Teeth: No dental caries, missing, or loose teeth. All teeth have appropriate shape.

Gingivae: No hypertrophy or recession. Unremarkable

Tongue: pink, well papillated. Frenulum intact. No masses/lesions/deviation.

Oropharynx: Well hydrated, no exudate/masses/lesions/foreign bodies noted.

Uvula pink, midline with no lesions or edema.

Neck: Trachea midline. No masses/lesions/pulsations noted. Neck supple, non-tender to palpation. Free range of motion. No stridor noted. No cervical adenopathy. No carotid pulses/thrills/bruits heard on auscultation. **Thyroid is non-palpable, unremarkable. No goiter**

Lymph nodes: Non-palpable, unremarkable preauricular, postauricular, submandibular, posterior cervical chain, anterior cervical chain, supraclavicular, and infraclavicular lymph nodes

Cardiovascular: PMI located at the 5th ICS in midclavicular line. Carotid pulses are 2+ bilaterally without bruits. RRR. S1/S2 distinct with no murmurs or S3/S4 heard. No splitting of S2 or friction rubs appreciated.

Chest: Symmetrical with no deformities or trauma. No tenderness on palpation. Respirations unlabored, no paradoxical respirations or use of accessory muscles. Lat/AP diameter 2:1.

Lungs: Lung sounds clear throughout on auscultation. No adventitious sounds. Chest expansion/diaphragmatic excursion symmetrical.

Abdomen: Abdomen symmetric and flat. No scars, striae, or pulsations noted. Bowel sounds are normoactive in all 4 quadrants. No aortic/renal/iliac/femoral bruits heard. Non-tender to palpation and tympanic throughout. No guarding or rebound tenderness. No hepatosplenomegaly to palpation. No CVA tenderness appreciated.

Skin: **Pale in appearance.** Warm and moist. Good turgor. Non-icteric. No tattoos noted. No moles.

Hair: Average quantity and distribution. No seborrhea/lice/dandruff noted

Nails: **No clubbing, capillary refill < 2 seconds in upper & lower extremities, appropriate shape & color.**

Musculoskeletal: Appropriate alignment of spine. Full ROM. No joint erythema or tenderness. Appropriate muscular development. Normal gait

Neurological: A&O x3

**Cranial nerves 2-12 intact:**

CN II – visual fields full by confrontation, visual acuity 20/20 OU uncorrected, see fundoscopy above

CN III/IV/VI – EOM intact, pupils 3mm OU and reactive to direct and consensual light & accommodation, no ptosis

CN V – face sensation intact b/l, corneal reflexes intact, jaw muscles strong without atrophy

CN VII – facial expressions intact, clearly enunciates words

CN VIII – repeats whispered words at 2 ft b/l. no lateralization of weber, Rinne with AC > BC AU

CN IX and X – no hoarseness, uvula midline with elevation of soft palate, gag reflex intact, no difficulty swallowing

CN XI – full ROM at neck with 5/5 strength and strong shoulder shrug

CN XII – tongue midline without fasciculations, good tongue strength

**Motor/Cerebellar:**

Full active/passive ROM of extremities without rigidity or spasticity. Symmetric muscle bulk with good tone. No atrophy, tics, tremors, or fasciculations. Strength 5/5 throughout. Rhomberg negative, no pronator drift noted. Gait steady with no ataxia. Tandem walking and hopping show balance intact. Coordination by rapid alternating movement and point to point intact b/l, no asterixis.

**Sensory:**

Intact to light touch, sharp/dull, and vibratory sense throughout. Proprioception, point localization, extinction, stereognosis, and graphesthesia intact bilaterally

**Reflexes**

2+ throughout, negative babinski, no clonus appreciated

**Meningeal signs:**

No nuchal rigidity. Brudzinski and kernig signs negative.

Psychiatric: Oriented to person, place, & time. Good affect, no hallucinations or abnormal behavior.

**Assessment:**

30 y/o male, no PMHx, presents with 2 weeks of sudden dizziness and associated nausea and 3/10 headache that lasts for approximately 10-15 minutes before spontaneously resolving. No improvement with Meclizine, no LOC or feelings lightheadedness.

*Differential Diagnosis:*

* ***Peripheral Vertigo***
  + ***Vestibular neuritis***
    - Patient has S/Sx such as vertigo lasting 10-15 minutes with associated nausea. Patient denies recent viral illness, although origin of VN is not completely understood. However, associated HA not typically present with VN, therefore, central causes must be placed on the differential. Pt has not showed improvement with Meclizine 12.5mg but this may be due to needing increased dose or patient taking dose after symptoms already appear.
  + ***Labyrinthitis***
    - *Patient does not have hearing loss making it more likely vestibular neuritis. Regardless, management is the same.*
  + ***Benign Paroxysmal Positional Vertigo (BPPV)***
    - Patient’s vertigo is not positional (ex: worse with laying down on one side or standing up) and it lasts longer than one minute and has other associated Sx not typically presented with BPPV. Dix-hallpike was unable to reproduce vertigo, however, this test only has sensitivity of 50-75%.
  + ***Meniere’s Disease***
* ***Central Vertigo***
  + ***Posterior fossa insult: multiple sclerosis, CVA, tumor, abscess, migraine, seizure***
    - Patient does admit to associated mild headache and nausea, therefore, central origin cannot be excluded. HINTS exam unable to be obtained because patient was not actively in vertigo during examination to yield additional physical findings. However, complete cranial nerve and peripheral neurologic exam was unremarkable. The nausea component may also be attributed to vestibular neuritis which is a peripheral cause.
* ***Presyncope***
  + ***Cardiovascular – structural vs arrythmia: MI, arrythmia, hypotension, valvular disorder***
  + ***Neurologic – vasovagal, seizure, carotid hypersensitivity, CVA***
  + ***Dysautonomia – autoimmune/paraneoplastic, chronic/toxic, glucose deranagement (diabetes), post-viral, neurodegenerative, POTS***
  + ***Metabolic – electrolyte derangement, hyper/hypothyroidism*** 
    - Unlikely to be pre-syncope as patient denies feeling of passing out/blacking out or LOC at any point. Patient denies cardiovascular, neurologic (aside from mild headache), or metabolic symptoms (refer to ROS) and physical examination of these systems were all within normal limits.
  + **Psychiatric** – **Anxiety**
    - Patient does admit to increased stress recently. However, this is a diagnosis of exclusion.

**Plan:**

* Peripheral vertigo - Vestibular neuritis vs BPPV
  + EKG to r/o cardiogenic causes
    - Results: regular rate/rhythm, normal axis deviation. Normal PR interval and QRS. Peaked T waves in V3, V4, V5, V6. Appears to be patient’s baseline when comparing to prior EKGS
  + Stat Labs
    - POC Glucose, CBC, BMP, TSH, B12, Magnesium
    - MRI not warranted at this time in the absence of FND and significant neurologic S/Sx
  + Medication
    - Meclizine 25mg every 12 hours
    - 10-day course of prednisone; 60 mg daily on days 1 through 5, 40 mg on day 6, 30 mg on day 7, 20 mg on day 8, 10 mg on day 9, and 5 mg on day 10.
    - Ondansteron 4mg q8h – Advised to only take if nausea becomes severe or vomiting occurs
    - If no improvement with pharmacotherapy, vestibular rehabilitation will be considered
  + Provided patient education Vestibuloneuritis and provided patient handout.
  + If patient experiences chest pain, SOB, LOC, headache increases in severity or duration, numbness/weakness/tingling, blurry vision, or any other neurologic deficit present to nearest ER for further evaluation and management
  + Follow-up in one week or sooner if symptoms worsen.