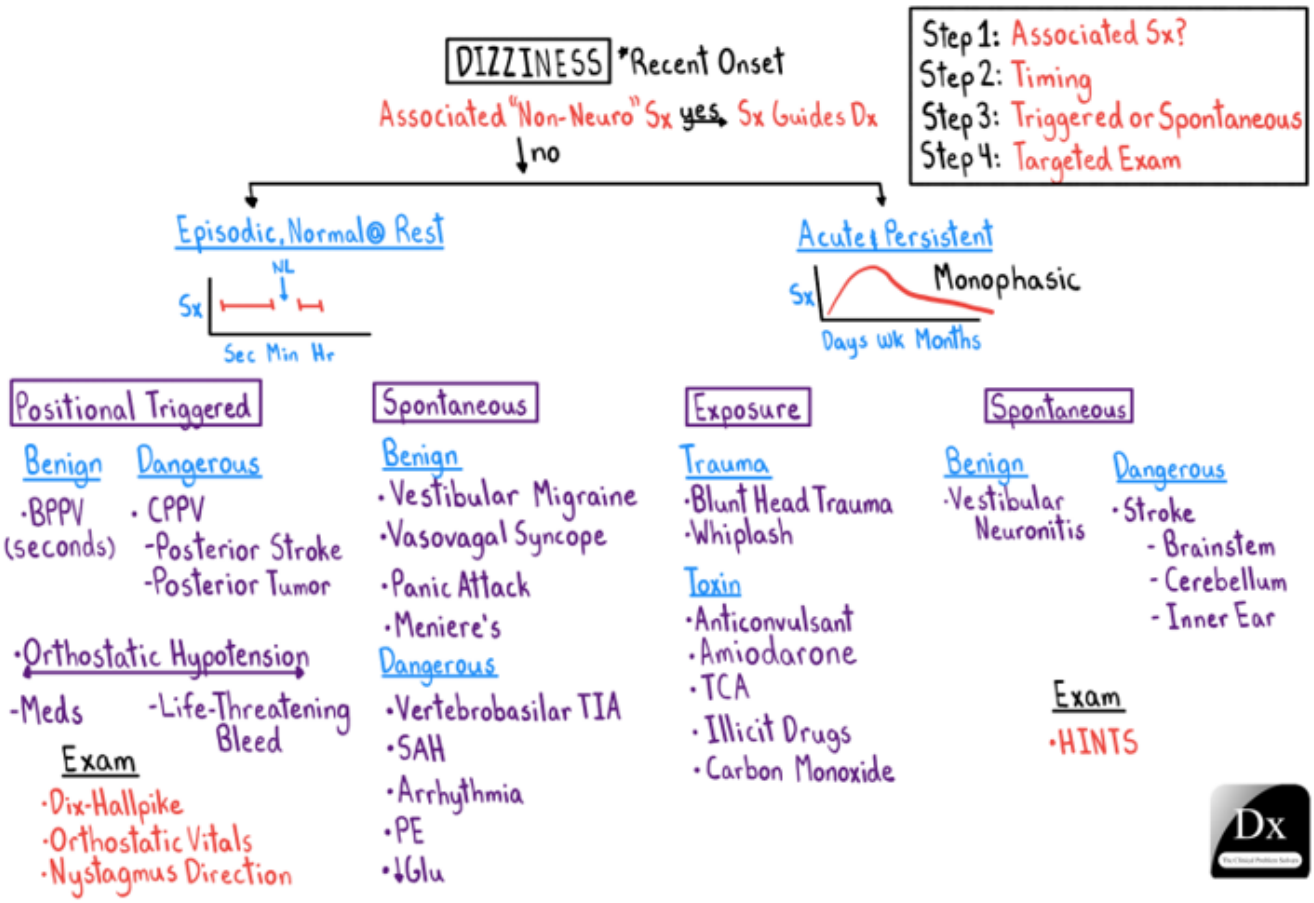

HINTS Exam

	Peripheral	Central
Head Impulse	Saccade	No saccade
Nystagmus	Unidirectional	Bidirectional
Test of Skew	No skew	Vertical skew

Vertigo Cause	Work-up	Management
1. Labrynthitis	**- Audiometry with unilateral hearing loss** **- HINTS exam suggesting peripheral etiology**	**- Steroids** **- Treat nausea** **- consider vestibular rehab**
2. Benign Paroxysmal Positional Vertigo	**- Dix-Hallpike Maneuver**	**- Epley Maneuver** **- Consider vestibular rehab**
3. Meniere's Disease	**- 2 episodes of vertigo lasting 20min – 12 hrs.** **- Audiometry with hearing loss** **- Tinnitus or fullness in ear**	**- Meclizine** **- Diuretics** **- Low Salt Diet** **- Consider vestibular Rehab**
4. Cerebellar Stroke	**- HINTS Exam suggesting central etiology** **- MRI Imaging** **(If concern for stroke, go straight to stroke protocol MRI)**	**- Consider alteplase** **- Consult Neurology; consider endovascular therapies** **- anti-PLT, maintain euglycemia, treat hypoxia, etc.**

Dizziness Pearls

- Don't classify dizziness into types such as: vertigo, pre-syncope and unsteadiness/disequilibrium based on patient' s description. In a systematic review of cardiac patients who had an underlying cardiac cause for their dizziness, >50% patients described vertigo rather than presyncope (PMID: 18843523) indicating this is not a valid way to differentiate the etiology. **Instead focus on timing, triggers & a targeted exam** to help guide your differential, such as the categories defined above.
- Patients w/ vertigo get worse w/ head movements: **KEY DISTINCTION**: Do head movements **trigger** vertigo (suggests episodic vertigo) vs. **exacerbate** vertigo (suggests acute vestibular syndrome)
- Don't use head CT first for vertigo thought to be caused by stroke, unless there are other deficits, and you are ruling out a hemorrhagic stroke to give TPA. The sensitivity of CT is only 7-16% in acute phase of stroke. Therefore, just start with MRI if you are concerned for stroke.
- Don't give meclizine for BBPV. It is not an appropriate treatment, given symptoms are short in duration (seconds - minutes). The NNT for the Epley maneuver

Classification and Etiologies