

A Case of BPPV in the Setting of Toxic Myopathy

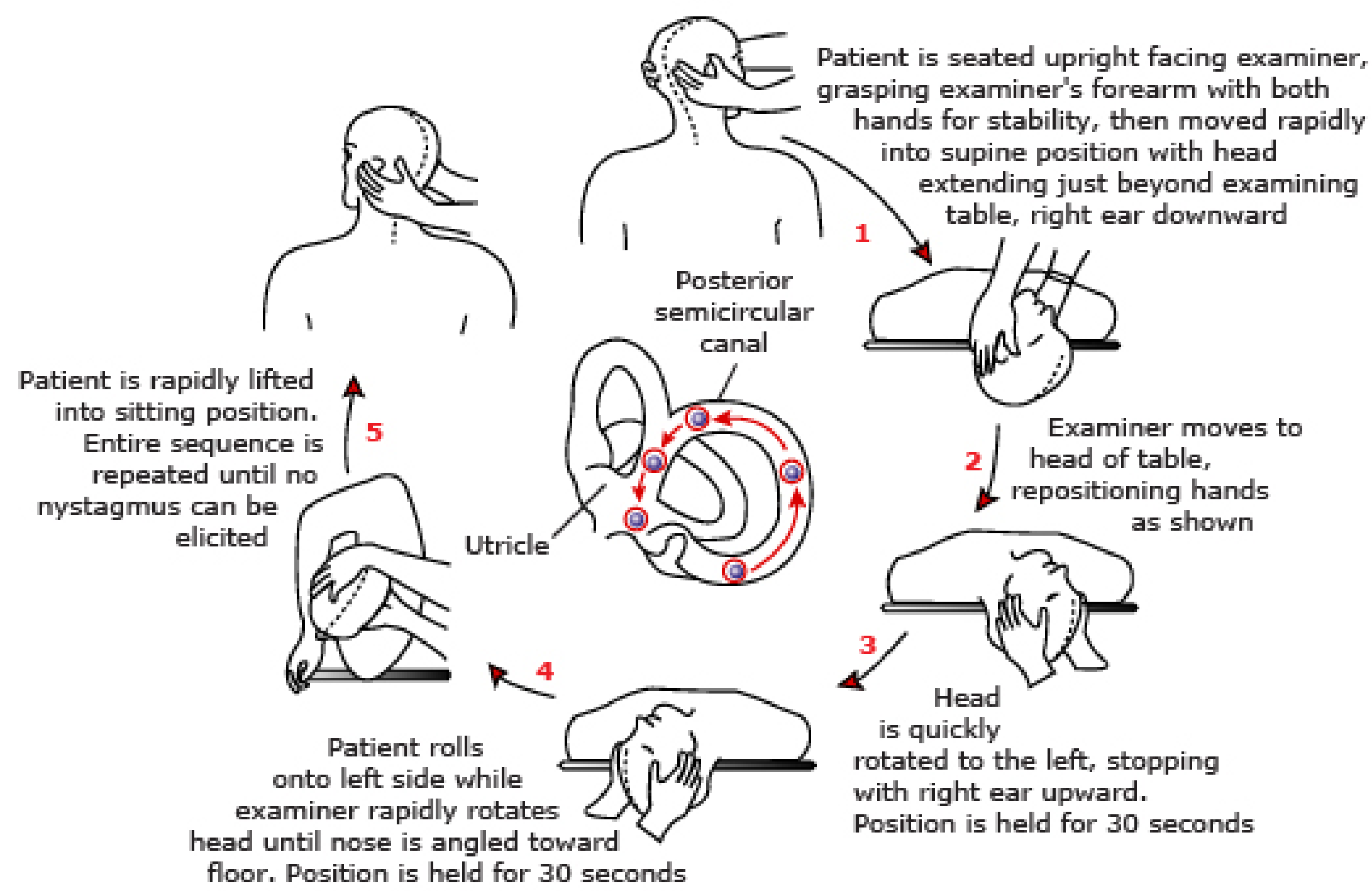
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Background

BPPV is now recognized as the most common cause of vertigo in adults, 2.4% of all people will experience an episode in their lifetime¹. The diagnosis is made in a patient with recurrent, brief episodes of vertigo which are provoked with specific types of head movements. Diagnosis is confirmed by observing nystagmus during a provoking maneuver.

Methods



In patients with benign paroxysmal positional vertigo (BPPV) due to posterior canal canalithiasis, the particle repositioning maneuver encourages the calcium carbonate debris to migrate toward the common crus of the anterior and posterior canals and exit into the utricular cavity. Step 1 is the standard Dix-Hallpike positioning test. Note that this illustration demonstrates the maneuver for right-sided BPPV.

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Case Description

We present a case of a 65-year-old woman with orthostatic hypotension, admitted to rehabilitation inpatient floor with toxic myopathy due to platinum-based chemotherapy treatment for recurrent Non-Hodgkin's lymphoma over the past year. Lymphoma presented as a large mass on her right submandibular region, with extension to the right ear. This past treatment course she received radiation in addition to chemotherapy.

Patient has had multiple syncopal episodes with mild traumatic head injury and was transferred to acute patient rehab with a significant decrease in self-care and mobility.

During her rehab course, severe episodes of dizziness associated with nausea and vomiting were reported. Patient would response by “freezing” in place, with fear of moving her head. Patient reported these episodes were ongoing at a frequency of 4 times per day for the past few weeks. Episodes were refractory to ondansetron and meclizine.

After detailed history, BPPV was suspected. Dix-Hallpike maneuver showed vertical nystagmus while left side-lying, which fatigued on retesting. Epley maneuver for particle repositioning was subsequently performed. Over the next 10 days of her rehab stay, patient had only 2 episodes of positional vertigo, associated with mild nausea but no vomiting. On her discharge day, repeat Dix-Hallpike test elicited vertical nystagmus showing now right-sided BPPV. After two bouts of particle repositioning maneuvers the patient had resolution in vertical nystagmus.

Patient demonstrated a significant improvement in CareTool scores (30 to 39) and functional mobility and was discharged to home with home health services.

Discussion

This is an interesting case of unmasking BPPV in a patient with a history of syncope and falls, in the setting of orthostatic hypotension and toxic myopathy.

It is often challenging to differentiate orthostatic hypotension, vestibulopathy secondary to platinum-based chemotherapy from BPPV.

Despite the diagnostic challenge, this case demonstrates how a simple, low-cost intervention can improve functional outcomes in an acute in-patient rehabilitation setting.



References

1. M. von Brevern, A. Radtke, F. Lezias et al., “Epidemiology of benign paroxysmal positional vertigo: a population based study,” Journal of Neurology Neurosurgery and Psychiatry, vol. 78, pp. 710–715, 2007
2. Foster CA, Baloh RW. Episodic vertigo. In: Rakel (Ed), Conn's Current Therapy, 47th ed, WB Saunders, Philadelphia, 1995. p.873.