Vestibular Neuritis

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Fact Sheet

Produced by

VESTIBULAR REHABILITATION SPECIAL INTEREST GROUP

A Special Interest Group of

ACADEMY OF NEUROLOGIC PHYSICAL THERAPY

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Vestibular neuritis (VN) is the third most common cause of peripheral vertigo.[1] The reported incidence is 3.5 – 15.5 per 100,000 and accounts for 7% of patients seen in vertigo specialty clinics.[1] Although the diagnosis of unilateral vestibular hypofunction is determined through clinical exam, the specific diagnosis of VN is one of exclusion.

A summary of the Bárány Society's diagnostic criteria include:[1]

- Acute, sustained spinning or non-spinning vertigo with moderate to severe intensity for at least 24 hours.
- Horizontal spontaneous nystagmus toward the non-affected ear, with a rotational component, enhanced by removing visual fixation (Frenzel lenses, felt through eyelid closure).
- No evidence for acute neurological symptoms or audiologic symptoms (ex. hearing loss, tinnitus). HINTS+ can also help differentiate central vs peripheral origin.

Additional signs and symptoms are acute or subacute onset of:[1]

- Oscillopsia – blurred vision or movement of visual surrounding
- Gait and postural imbalance toward the affected ear –positive Romberg test
- Nausea and vomiting
- If nystagmus is NOT reduced with visual fixation, diagnosis should not be considered peripheral in origin.
- Positive Head Impulse Test: indicating deficit of the vestibulo-ocular reflex

Medical Treatment for Vestibular Neuritis?

Steroid Management:[2]

- A systematic review and meta-analysis demonstrated that steroids have a significant therapeutic effect on VN (complete caloric recovery, improvement of canal paresis) at 12 months post onset, but no significant difference in short term follow-up (1,3,6 months).
- Steroid therapy was recommended as the pharmaceutical treatment of choice for vestibular neuritis with recommendation that it should be started within the first 24 hours of symptom onset for maximum benefit[3], but not after one week of onset.[4,5]

Symptom Management:

- People who used medications that act on the central nervous system were found to require longer time in vestibular rehabilitation compared to those who were not using these meds.[6]
- "Short-term, low-dose antihistamines may help to control symptoms allowing participation in vestibular physical therapy."[6]

What are the recovery and recurrence rates of VN?

Most patients prefer to stay in bed for 1 to 3 days, and after 1 to 6 weeks are symptom-free during slow movements. Recuperation is dependent on recovery of the vestibular nerve through functional restitution, central compensation, and

physical activity. Central compensation is improved by vestibular rehabilitation. Brandt et al reported recurrence rate of 2% within 10 years with no recurrence observed in the initial affected ear.[7] Recovery can be complicated by benign paroxysmal positional vertigo that develops within a few weeks in approximately 10 to 15% of patients with VN.[6] It is recommended that patients be instructed in this possibility, and that they can be treated with repositioning treatments if needed. Another complication of VN is a chronic condition called persistent postural perceptual dizziness (3PD).[6]

Why do some patients have persistent imbalance?

Persistent balance problems can be due to inadequate central compensation or to incomplete peripheral recovery, both of which respond to vestibular rehabilitation.[8]

Why should I refer patient with Vestibular Neuritis to Vestibular Physical Therapy?

- There is moderate to strong evidence supporting vestibular physical therapy for individuals with unilateral vestibular hypofunction, including VN.[6]
- Vestibular physical therapy has been shown to reduce symptoms of dizziness, improve gaze and postural stability, and improve function.[6]
- There is evidence of improved outcomes when vestibular physical therapy is initiated early after symptom onset.[6,9]

Physical therapists reporting experience treating patients with vestibular disorders can be found at http://www.neuropt.org/map_Vestibular/ map.html.

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