Dizziness Pathway

This guidance has been developed in collaboration with local specialists. It is intended to assist GPs in decision making and is not intended to replace clinical judgment.

History:

Syncope/Presyncope (sensation of impending loss of consciousness):
cardiovascular disease, postural hypotension, arrhythmia, anaemia, murmurs, medications, vasovagal

Dysequilibrium / Imbalance (unsteadiness): multiple sensory deficits, peripheral neuropathy, cerebellar ataxia, presbyastasis, CVA/TIA, metabolic

Psychogenic: hyperventilation, anxiety, panic, somatisation

Vertigo: Peripheral causes BPPV, vestibular neuritis or labyrinthitis, Meniere’s; Central causes Vertebrobasilar CVA/TIA, migraine, MS

Examination:
Cardiovascular, Neurological (esp cranial n, nystagmus, cerebellar signs, gait), Ears, Vision, Erect and Supine BP, Dix-Hallpike test, BM glucose, Affect

Investigations: For Syncope/Presyncope consider FBC, U&E, Glucose, Lipids, TFTs, ECG, Echocardiogram, 24 hr tape

Red Flag Features

Sudden (sensorineural) hearing loss
Acute onset tinnitus
Abnormal neurological signs
Central causes: Possible TIA/CVA, Vascular, MS, Spinocerebellar degeneration
Seizures
Loss of consciousness
Arrhythmia,
Murmur requiring investigation,
Diabetic peripheral neuropathy, other ‘medical’ causes

Peripheral vestibular causes (approx 40%)

BPPV Confirm by Dix-Hallpike test, treat by Epley manoeuvre or similar. Supportive advice of remaining mobile to assist compensation. Review patient at 2-4 weeks. Repeat once.

Vestibular neuritis / labyrinthitis
Treat with vestibular sedatives if severe e.g. prochlorperazine.
Supportive advice of remaining mobile to assist compensation.

(possible) Meniere’s disease
Vestibular sedatives may be useful in acute episode
Advise low salt diet
Supportive advice of remaining mobile to assist compensation.

Psychological cause or component (up to 26%)
Support / treatment for primary components of anxiety, panic disorder, avoidance, depression which make dizziness worse

Multisensory dizziness (up to 17% of pts)
Improve comorbid factors, e.g. diabetes control, visual correction

Other common causes

Sudden (sensorineural) hearing loss
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Consider referral for vestibular rehabilitation
Consider referral to Falls Clinic
Consider need for Psychology or Psychiatry input

See explanatory video on dizziness assessment and Dix-Hallpike & Epley manoeuvres with Dr Ian Colvin

Comments & enquires relating to medication: NHS Camden Medicines Management Team mmt.camdenccg@nhs.net
Refer to current BNF or SPC for full medicines information

Clinical contact for this pathway: Dr Alex Warner, a.warner@nhs.net
General Information points

AVOID long-term pharmacological use in dizziness or vertigo (e.g. prochlorperazine (stemetil), cinnarizine, anticholinergics like scopolamine); there is little evidence of clear effectiveness but they often delay central compensation and create a psychological dependence.

All patients should receive general supportive and reassurance advice as a significant proportion develop secondary avoidance behaviour. They should be advised to mobilise as much as possible as this helps them compensate quicker. Those patients at risk of developing secondary avoidance behaviour should be referred to Audiovestibular Medicine.

Multisensory dizziness is age related and due to impairment of inner ear, peripheral neuropathy, (cervical) arthritic changes, vision and hearing. It is present in up to 17% of dizzy patients.

Vertigo associated with headache may be migrainous vertigo which should be treated with migraine treatments i.e. analgesia, triptans.

Three general classes of drugs are used to suppress the vestibular system, although their effectiveness has not been reliably assessed:
- Antihistamines, eg. Cinnarizine (stugeron)
- Phenothiazines, eg. Prochlorperazine (stemetil)
- Anticholinergics, eg. Scopolamine

Menière’s disease:
‘Primary endolymphatic hydrops’ (swelling of the inner ear compartments) causing impairment of balance and hearing, with some rare secondary causes.

It is a diagnosis of exclusion made in secondary care.

4 cardinal features: usually unilateral
- Vertigo – characteristically rotatory or rocking and can be associated with nausea and vomiting
- Hearing loss - sensorineural, initially affecting the lower pitches, may fluctuate and often becomes permanent
- Tinnitus - typically of low pitch and may be associated with auditory distortion
- An aura of ‘fullness’ or pressure in the ear or the side of the head can last from 20 minutes to several hours

Clinical course varies among individuals and over time in the same individual.

Little evidence for long-term effectiveness of a low salt diet, diuretics and betahistine (Serc), but expert opinion supports these.

Chief role of medication is to alleviate symptoms such as vertigo, nausea, and vomiting during an acute or transient dizzy episode; rarely is surgery indicated.

Benign paroxysmal positional vertigo (BPPV)

One of the most common causes of dizziness (up to 65% of vertigo)
- Severe, brief paroxysms of rotational vertigo provoked by positional changes
- Idiopathic in 35% of cases, about 15% have a history of relatively minor prior head trauma
- The remainder is a residual effect of a variety of vestibular pathologies, most commonly Menière’s disease (30%), but also vestibular neuronitis, ear surgery, and inner ear ischaemia.

There is a relatively straightforward confirmatory test and treatment manoeuvre for this condition, which should be attempted when the diagnosis is being considered.

Hallpike test: The diagnosis is confirmed by this test: The patient is rapidly lain down flat on a couch from a sitting position with head turned to the side and neck extended. After a delay, a typical torsional horizontal nystagmus is seen for up to 30 seconds. It is present in the opposite direction on sitting back up. The test is repeated on the other side. Caution should be used in patients with neck pathology. (Video)

Epley Manoeuvre: (Particle repositioning manoeuvre) There is evidence that this is effective in up to 90% of patients in improving or resolving symptoms. Following a positive Hallpike test, the head is turned through 180 degrees in 2 x 90 degree stages with a wait of 30 seconds in between. It may be repeated at subsequent clinic visits. (Video)

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Acute vestibular neuronitis (acute vertigo) and labyrinthitis (vertigo with altered hearing)

Abrupt onset of severe, debilitating vertigo with associated unsteadiness, nausea and vomiting.

Patients often describe their vertigo as spinning, which increases with head movement.

On physical examination spontaneous, unidirectional, horizontal nystagmus is the most important physical finding and fast phase beat towards the side of lesion (acute phase) and towards the healthy ear (during compensation).

The patient tends to fall toward the affected side when attempting ambulation or during Romberg tests.

Some patients may develop benign paroxysmal postural vertigo (BPPV) later.

Symptoms of other diagnoses should be absent: multidirectional, non-fatiguing nystagmus suggesting vertigo of central origin; hearing loss; other cranial nerve deficits; truncal ataxia (suggests cerebellar disease or another CNS process); inflamed tympanic membrane; mastoid tenderness; high fever; nuchal rigidity.

Causes: may be viral and ischaemia of the vestibular nerve and inner ear.