

The First Attack of Vertigo: Is it a Stroke or is it Inner Ear Disease?

If vertigo suddenly occurs, with no pre-existing history of dizziness, then both patient and doctor are concerned whether this represents a transient ischaemic attack (TIA or “mini-stroke”) which may herald the advent of a much more serious stroke with its devastating consequences.

The diagnosis of a TIA/stroke can be reasonably suspected by looking for a combination of symptoms, signs, risk factors & investigations.

Symptoms

If there have been more than 3 vertigo events it is less likely to be a TIA/stroke. Associated central system symptoms such as double vision, difficulty speaking, swallowing and moving the face or arms and legs suggest a TIA/stroke. If the severe vertigo is for less than 30 minutes, this points towards a TIA/stroke as the cause.

Auditory symptoms such as hearing loss, tinnitus and pain tends to occur with inner ear disease but can occur with a TIA/stroke.

Signs

Reduced conscious level, inability to stand unassisted, weakness of the arms, legs and facial weakness that involves the mouth but spares the eye and forehead are clear signs of a stroke, however, more subtle signs can be found on eye examination. In particular a feature called “skew deviation” is looked for and is highly suggestive of a TIA/stroke. Atypical nystagmus is of some concerning significance (e.g. bi-directional nystagmus or down beat nystagmus), however, a normal head impulse test is a weak indicator of a TIA/stroke.

A rash of the outer ear, soft palate and facial weakness involving the mouth, eye and forehead are strong indicators of an inner ear cause.

Risk factors

A more elderly patient with a history of cardiovascular disease is at greater risk of a TIA.

Investigation

An MRI shows changes consistent with a TIA or stroke however clinical examination has been found to be more accurate within 48 hours of the event. MRI changes can take up to 48 hours to appear.

Treatment

If a TIA/stroke is suspected, then an urgent opinion is needed from a neurologist.

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