PROCEDURE

Epley maneuver

The Epley maneuver uses guided head and body movements to treat a common form of positional vertigo.

PURPOSE
Return loose inner-ear particles to reduce positional vertigo

PROCEDURE TYPE
Therapeutic - bedside head-and-body positioning maneuver

WHERE IT IS DONE
Outpatient clinic or at the bedside

ANAESTHESIA
None

HOW LONG IT TAKES
5 to 15 minutes

PREPARATION
No fasting; wear flexible clothing and report neck or back problems

RECOVERY
Same day; no driving while dizzy or unsteady

MAIN RISKS
Temporary vertigo, nausea, imbalance, neck or back strain

RESULTS
Often apparent immediately or over the next few days

Overview

The Epley maneuver is a sequence of head and body movements. It treats posterior canal benign paroxysmal positional vertigo, usually shortened to BPPV.

BPPV happens when tiny calcium particles in the inner ear move into a fluid-filled balance canal. Certain head movements then send misleading balance signals to the brain, causing short bursts of spinning.

During the Epley maneuver, you move through several positions while a healthcare professional supports and guides your head. Gravity helps move the particles out of the affected canal and into an area where they are less likely to cause vertigo.

The maneuver does not involve surgery, needles, or anaesthesia. It may be performed after a

positional examination, such as the Dix-Hallpike test, identifies the affected ear.

Why the procedure is performed

The Epley maneuver is mainly used for BPPV affecting the posterior semicircular canal. This is the inner-ear canal most often involved in BPPV.

Your healthcare professional may offer it if brief spinning episodes are triggered by movements such as lying back, rolling over in bed, looking upward, or bending down. The diagnosis is usually supported by a characteristic pattern of eye movement during positional testing.

The aim is to stop or reduce these episodes. Treating the vertigo may also help you move more confidently and lower your risk of falling.

The Epley maneuver does not treat every form of dizziness. Constant dizziness, faintness, medication effects, migraine-related vertigo, and problems involving the heart, brain, or other parts of the inner ear need different assessment and treatment.

Who should and should not have it

The maneuver may be appropriate when testing suggests posterior canal BPPV and your neck and back can safely tolerate the required positions. It can often be modified for older adults, people with limited mobility, and people who cannot lie fully flat.

It may not be the right maneuver if a different inner-ear canal is affected. Other repositioning movements may work better for horizontal or anterior canal BPPV.

The procedure may need to be avoided, delayed, or modified if you have:

Tell the person performing the maneuver about recent injuries, surgery, vascular disease, severe arthritis, or new neurological symptoms. Pregnancy does not automatically prevent treatment, but positioning may need to be adjusted.

- An unstable neck injury or severe limitation in neck movement
- Recent neck or spine surgery
- A condition that makes lying flat unsafe or very difficult
- Certain serious blood-flow problems involving the neck or brain
- Severe back problems that prevent safe positioning

- Symptoms suggesting that the dizziness may not come from BPPV

How to prepare

No fasting, bowel preparation, or medication change is usually required. Blood thinners like warfarin or apixaban do not normally need to be stopped because the maneuver does not cut or puncture the body.

The treating facility's own instructions take priority. Follow any specific directions it gives you.

Wear clothing that allows you to turn and lie back comfortably. Consider avoiding a heavy meal just beforehand because the maneuver can briefly cause nausea.

Bring an up-to-date medication list. Tell the healthcare team if you have neck or back problems, limited movement, severe reflux when lying flat, or a history of fainting with position changes. Do not stop dizziness medicine unless you have been specifically instructed to do so.

If possible, arrange for someone to accompany you. You may feel temporarily unsteady afterward and may not be safe to drive.

What happens during the procedure

You usually begin sitting upright on an examination bed. The exact sequence may be adjusted for your mobility and which ear is affected.

For a typical posterior canal Epley maneuver, the healthcare professional will:

Each position is held long enough for eye movement and vertigo to settle, often around 30 seconds or longer. You may feel a sudden spinning sensation during one or more positions. This is expected and can help confirm that the particles are moving.

The healthcare professional may watch your eyes for involuntary movements called nystagmus. These movements provide information about the affected canal and whether the maneuver is working.

The sequence may be repeated during the same visit.

- Turn your head about 45 degrees toward the affected side
- Help you lie back with your head supported and slightly extended
- Turn your head toward the opposite side
- Help you roll onto your side with your face angled toward the floor

- Help you return to sitting

Recovery and what to expect afterward

The maneuver should not cause significant pain. Mild neck or back discomfort can occur because of the positions. Tell the healthcare professional immediately if you develop sharp pain, numbness, or weakness.

You can usually eat and drink normally afterward. If you feel nauseated, start with small sips of fluid and light food.

Most people can resume ordinary activity the same day. Temporary unsteadiness or a vague "off-balance" feeling may last for hours or, sometimes, a few days. Move carefully, use handrails, and avoid activities where a sudden dizzy spell could cause a fall.

Do not drive, cycle, use machinery, or work at height while you are dizzy or unsteady. You may drive once you can turn your head, walk, and react normally without symptoms.

Many people return to desk work the same day or the next day. Work involving climbing, driving, machinery, or rapid head movement may require more time.

Some facilities give short-term sleeping or head-position instructions. Routine strict postural restrictions are not generally needed after a successful maneuver, but follow the instructions given for your situation.

Risks and possible complications

The Epley maneuver is non-invasive, but it can temporarily bring on the symptoms it is intended to treat.

Possible effects include:

Movement into another canal is called canal conversion. It can change the pattern of vertigo and may require a different repositioning maneuver.

Falls are a concern if you stand or walk before your balance has settled. Assistance and slower movements can reduce this risk.

Serious injury is not expected, but people with significant neck, spine, or blood-vessel conditions require careful assessment and may need a modified technique.

- Brief, sometimes strong, spinning during the maneuver
- Nausea or occasional vomiting

- Temporary imbalance afterward
- Neck or back discomfort
- Movement of particles into another inner-ear canal

Results and follow up

Your response may be checked immediately by repeating the positional test. Some people notice clear improvement at once. For others, spinning improves over the next few days while mild imbalance takes longer to settle.

One treatment is not always enough. A healthcare professional may repeat the Epley maneuver at the same appointment or arrange another visit.

BPPV can return after successful treatment. Recurrence does not necessarily mean that anything dangerous has happened, but the diagnosis should be confirmed before repeated home treatment.

Routine follow-up is appropriate if positional spinning continues, returns, or changes pattern. Further examination can determine whether the same canal remains affected or another cause needs to be considered.

Alternatives

Observation is reasonable for some people because BPPV can improve without a maneuver. The trade-off is that vertigo may continue for days or weeks, limiting activity and increasing fall risk.

The Semont maneuver is another repositioning treatment for posterior canal BPPV. It uses faster side-to-side movements and may be harder for someone with limited mobility, but it can be effective.

Brandt-Daroff exercises are repeated movements performed at home. They may be easier to learn without identifying one affected side, but they usually require repeated sessions and may provoke symptoms each time.

Other canal-specific maneuvers are used when testing shows horizontal or anterior canal BPPV. Using the wrong maneuver may not help and can change where the particles sit.

Vestibular rehabilitation uses guided balance and movement exercises. It can help persistent imbalance or more complex balance problems, but it may take longer than a successful canal-repositioning maneuver.

Anti-nausea or motion-sickness medicines may reduce symptoms for a short time. They do not move the particles back into place and can cause sleepiness.

Surgery is reserved for rare, severe cases that remain disabling despite correctly performed repositioning treatment.

When to call your healthcare team

Contact your healthcare team during routine hours if positional vertigo continues after treatment, returns later, or is affecting walking, work, or sleep. You may need repeat testing or another maneuver.

Seek prompt medical advice if you develop persistent vomiting, cannot keep fluids down, have new hearing loss, or develop significant neck or back pain after the procedure.

Call emergency services for dizziness accompanied by new facial drooping, one-sided weakness, difficulty speaking, severe trouble walking, fainting, chest pain, a sudden severe headache, or loss of vision. These are not typical effects of the Epley maneuver or uncomplicated BPPV.

Common questions

Will I be asleep?

No. You remain awake, and no anaesthesia or sedation is normally used. You need to move between positions and report what you feel.

Can I drive home?

Not if you remain dizzy, nauseated, or unsteady. Arrange another way home if possible. Drive only when you can walk, turn your head, and react safely.

How painful is it?

It is not usually painful, but it may briefly cause strong spinning and nausea. Neck or back discomfort is possible. Report sharp pain immediately.

When will I know if it worked?

You may notice improvement immediately, and repeat positional testing can provide an early answer. Mild imbalance may take several days to settle.

Can I do the Epley maneuver at home?

A healthcare professional may teach you a home version after confirming BPPV and

identifying the affected side. Home treatment is not suitable if the diagnosis is unclear or the positions are unsafe for your neck, back, or balance.

How many times will I need it?

Some people improve after one maneuver. Others need it repeated during the visit or on another day. Persistent symptoms should be reassessed rather than treated repeatedly without review.

Sources

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