

Glossary of Key Terms

THE ACOUSTIC NEUROMA (VESTIBULAR SCHWANNOMA) HANDBOOK

Plain-language definitions of the clinical terms used throughout the handbook and in appointments, scan reports, and clinic letters. If a term you encounter is unfamiliar, this glossary is the quickest place to look.

Acoustic neuroma (vestibular schwannoma). A slow-growing, non-cancerous tumour that develops from Schwann cells surrounding the vestibular nerve. It usually affects hearing, balance, and nearby cranial nerves.

Aseptic (chemical) meningitis. Inflammation of the membranes around the brain after surgery that mimics bacterial meningitis but is not caused by infection. It arises when blood products or tissue debris irritate the cerebrospinal fluid, and it is managed by treating the inflammation rather than with antibiotics.

Ataxia. Difficulty coordinating movement and balance. Walking may appear unsteady or wide-based.

Axonotmesis. Damage to the internal fibres of a nerve while its outer sheath remains intact. The fibres can regrow along their original channels at roughly one millimetre per day, but recovery is slow and may be incomplete.

Benign tumour. A tumour that does not spread to other parts of the body or invade tissue. Benign does not necessarily mean harmless.

BiCROS aid. A hearing device that transmits sound from the deaf side to the better ear and also amplifies sound at the better ear, for patients who have some hearing loss on that side as well.

Bone-anchored hearing system (BAHA). A device that transmits sound through the bones of the skull directly to the working cochlea, bypassing the damaged ear. It requires a minor surgical procedure.

Brain fog. A term describing cognitive symptoms such as slowed thinking, poor concentration, forgetfulness, and mental fatigue, widely recognised in neurological and vestibular medicine contexts.

Brainstem. The lower part of the brain connecting the brain to the spinal cord. It controls essential functions such as breathing, heart rate, swallowing, and consciousness.

Central compensation. The brain's process of adapting to vestibular damage by relying more heavily on vision, proprioception, and the remaining balance system.

Cerebellopontine angle. The small space near the brainstem where acoustic neuromas usually grow.

Cerebellum. The part of the brain responsible for coordination, balance, and fine movement control.

Cerebrospinal fluid (CSF). The clear fluid surrounding the brain and spinal cord that cushions and protects the nervous system.

Chorda tympani. A branch of the facial nerve responsible for taste sensation from the front of the tongue.

Cochlear nerve. The hearing portion of the eighth cranial nerve that carries sound information from the inner ear to the brain.

Cognitive fatigue. Mental exhaustion caused by the brain working harder than normal to process information or compensate for neurological disruption.

Cranial nerves. Twelve pairs of nerves that emerge directly from the brain and control functions such as hearing, facial movement, swallowing, and eye movement.

CROS aid. Contralateral Routing of Signal. A microphone worn on the deaf side that transmits sound wirelessly to a receiver worn on the hearing ear. It reduces the head shadow effect but does not restore direction detection.

CyberKnife. A stereotactic radiosurgery system that uses a robotic arm to deliver radiation beams from many angles without requiring a rigid head frame.

Dexamethasone. A steroid medicine given around the time of surgery, and sometimes after radiosurgery, to reduce swelling around the brain. It is normally given for a short period and tailed off gradually.

Facial nerve (cranial nerve VII). The nerve controlling facial movement, blinking, tear production, and some taste sensation.

Facial palsy. Weakness or paralysis of the facial muscles caused by facial nerve dysfunction.

Fractionated radiotherapy. Radiation delivered in multiple smaller sessions over several weeks rather than in a single session, allowing healthy tissue to repair between doses.

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Gadolinium. The contrast agent injected during an MRI scan. It accumulates in tissues with increased vascular activity, including vestibular schwannomas, making the tumour appear brighter and more clearly defined.

Gamma Knife radiosurgery. A highly focused form of radiation treatment used to stop or slow tumour growth without open surgery.

House-Brackmann scale. The standard clinical scale for grading facial nerve function after surgery, running from Grade One, normal function, to Grade Six, complete paralysis.

Hydrocephalus. A build-up of cerebrospinal fluid inside the brain's ventricular system, increasing pressure within the skull.

Hyperacusis. Increased sensitivity to ordinary sound, so that everyday noises are experienced as uncomfortably loud or harsh. It is treated with structured sound therapy and counselling.

Internal auditory canal. A narrow bony canal carrying the hearing and balance nerves from the inner ear towards the brain. It is also called the internal acoustic meatus, and the terms intracanalicular and intrameatal both mean confined within it.

Koos Classification System. A grading system used to describe the size and extent of an acoustic neuroma and its relationship to the brainstem.

Linac. A linear accelerator. A standard radiotherapy machine that produces high-energy X-ray beams and can be used to deliver stereotactic radiosurgery.

Lumbar drain. A temporary tube inserted into the lower back to drain cerebrospinal fluid.

Meningitis. Inflammation of the membranes surrounding the brain and spinal cord. After surgery it may be infective, caused by bacteria, or chemical, caused by irritation of the cerebrospinal fluid. See also aseptic (chemical) meningitis.

Multidisciplinary team (MDT). The panel of specialists from different fields who meet regularly to review scans, symptoms, and clinical history and agree a management plan for each patient.

Neurofibromatosis type 2 (NF2). A genetic condition in which schwannomas grow on both auditory nerves. It is distinct from sporadic acoustic neuroma and affects a small minority of patients.

Neuroplasticity. The brain's ability to reorganise and adapt following injury, sensory loss, or neurological disruption.

Neuropraxia. The mildest form of nerve injury. The nerve fibre remains structurally intact but temporarily cannot conduct signals. It is the most common cause of facial weakness after acoustic neuroma surgery and the capacity for recovery is high.

Neurotmesis. The most severe form of nerve injury, in which the whole nerve including its outer sheath is disrupted. Surgical repair or grafting is required, and recovery is slower and less complete.

Neurotologist. An ENT consultant who has completed sub-specialist training in the inner ear and lateral skull base.

Nystagmus. Involuntary repetitive eye movements often linked to vestibular dysfunction.

Oscillopsia. Blurring or instability of vision during head movement, caused by failure of the vestibulo-ocular reflex.

Proton beam therapy. A form of radiation using protons rather than X-rays. It is not routinely funded on the NHS for acoustic neuroma and has no proven advantage in this condition.

Pseudo-progression. An apparent increase in tumour size visible on MRI scans in the first one to two years after radiation treatment, caused by inflammatory response rather than genuine growth.

Punctal plugs. Small devices inserted into the tear drainage channels to reduce tear loss and protect an eye that cannot close fully.

Pure tone average. The average volume at which you can detect tones across the main speech frequencies on an audiogram.

Scanxiety. The anxiety that builds before, during, and after imaging while waiting for the result. It is common enough in brain tumour communities to have acquired its own name.

Sensorineural hearing loss. Hearing loss caused by damage to the inner ear or hearing nerve.

Serviceable hearing. Hearing that is still doing useful work, conventionally defined as a pure tone average better than fifty decibels together with word recognition better than fifty per cent.

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Single-sided deafness (SSD). Complete or near-complete hearing loss in one ear.

Stroke. Damage to brain tissue caused by interrupted blood flow or bleeding within the brain.

Synkinesis. Involuntary movement in one part of the face triggered by movement in another, caused by imprecise regrowth of the facial nerve. It typically appears three to six months after surgery.

Tarsorrhaphy. A minor surgical procedure in which the eyelids are partially sutured together to reduce corneal exposure where the eye cannot close.

Tinnitus. The perception of sound, such as ringing, buzzing, or hissing, without an external source.

Trigeminal nerve (cranial nerve V). The nerve responsible for facial sensation and chewing muscles.

Vertigo. A false sensation of spinning or movement, often caused by vestibular dysfunction.

Vestibular nerve. The balance portion of the eighth cranial nerve where acoustic neuromas originate.

Vestibular rehabilitation therapy (VRT). A specialised form of physiotherapy designed to improve balance and reduce dizziness through targeted exercises.

Vestibulocochlear nerve (eighth cranial nerve). The nerve bundle comprising both the vestibular nerve and the cochlear nerve.

Visuospatial dysfunction. Difficulty processing spatial relationships and visual context, documented in acoustic neuroma patients before any medical intervention.

Word recognition. Also called speech discrimination. The percentage of words you can repeat correctly when they are played at a comfortable volume. It measures clarity rather than volume.