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MADISON NEUROLOGY LLC

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Neurology Care 7 days a Week. Because Your Brain Matters.

Normal Pressure Hydrocephalus (NPH)

Patient education guide · Neurodegenerative & Memory · Madison Neurology LLC

What is it?

Normal pressure hydrocephalus is a treatable condition in which excess cerebrospinal fluid gradually enlarges the brain's fluid spaces (ventricles), stretching nearby nerve fibers. It classically causes a trio of symptoms — walking difficulty, urinary incontinence, and cognitive slowing ('wet, wobbly, and wacky') — mainly in adults over 60. It is one of the few potentially reversible causes of dementia.

How does it happen?

In most cases the cause is unknown (idiopathic NPH) — the fluid drainage system becomes less efficient with age. Secondary NPH can follow a prior brain hemorrhage, meningitis, or head injury.

Common symptoms

- Slow, shuffling, magnetic walk — feet seem stuck to the floor; frequent falls
- Urinary urgency and incontinence
- Slowed thinking, forgetfulness, and apathy
- Symptoms progress gradually over months to years
- Headache is usually absent despite 'hydrocephalus'

How is it diagnosed?

MRI shows enlarged ventricles out of proportion to brain shrinkage, with characteristic patterns. The key test is a high-volume lumbar puncture (or temporary lumbar drain): walking and cognition are tested before and after removing fluid — improvement predicts benefit from shunt surgery.

How is it treated?

The standard treatment is surgical placement of a ventriculoperitoneal shunt — a small programmable valve and tube that drains excess fluid to the abdomen. Walking improves most reliably (in the majority

of well-selected patients); cognition and bladder control may also improve, especially with earlier treatment. Physical therapy supports recovery.

What does the future hold?

NPH is one of neurology's most treatable conditions: most appropriately selected patients walk better after shunting, and gains can last years, though the underlying tendency to fluid buildup persists and valve adjustments may be needed. Untreated, symptoms gradually progress. Early evaluation matters — long-standing symptoms respond less fully.

Questions patients commonly ask

Q: Is this the same as Alzheimer's?

A: No — NPH is caused by fluid pressure dynamics and is potentially reversible with a shunt, which is why distinguishing it from Alzheimer's matters so much.

Q: Is shunt surgery risky?

A: It is a common neurosurgical procedure; complications (infection, over-drainage, blockage) occur in a minority and are usually correctable. Modern programmable valves allow fine-tuning without surgery.

Q: Will all three of my symptoms improve?

A: Walking responds best (60-80% of selected patients); bladder and thinking improve in fewer. Earlier treatment gives better odds.

National support groups & resources

- **Hydrocephalus Association** — hydroassoc.org
- **American Academy of Neurology — Brain & Life patient resources** — brainandlife.org
- **Alzheimer's Association (24/7 Helpline)** — alz.org — 1-800-272-3900

(Organization contact details were current at the time of compilation; please verify online.)

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