Normal Pressure Hydrocephalus (NPH) is an uncommon brain disorder that can produce memory troubles, difficulty with walking, and difficulty controlling bowel or bladder. Many patients with mid to late-stage dementia develop problems with walking and bladder. These common shared symptoms complicate the doctor’s job of distinguishing Alzheimer’s from NPH.

Most persons with NPH develop problems with walking and bladder control at the same time as troubles with thinking or memory. Patients with Alzheimer’s disease usually develop memory and other intellectual problems well in advance of the difficulties with walking. Both groups of individuals can develop enlargement of fluid-filled spaces in the brain referred to as “hydrocephalus” (hydro=water; cephalus=brain). Doctors can perform specific tests, such as draining fluid by spinal tap or monitoring pressure to determine the likelihood that patients have NPH.

The treatment for NPH is an operation on the brain to insert a tube that drains the excess fluid. This tube is placed inside the middle of the brain and then a long drainage tube is inserted under the scalp through tissue beneath the skin of the neck, the chest wall and into the cavity between the stomach and the abdominal muscles, referred to as the “peritoneal cavity”. The term “VP shunt” refers to the ventricle into which the shunt is placed and the peritoneal where the shunt will drain. This procedure has possible side effects.

The insertion of a shunt to drain fluid in the brain of a person with NPH will often produce improvement of walking and bladder control. The shunt is less likely to improve thinking or memory.

Persons with advanced dementia are highly unlikely to benefit from this brain operation and these individuals are at great risk for confusion from the anesthesia and the hospitalization. Patients with advanced dementia are poor candidates for shunting unless other neurological problems exist. Individuals with mild dementia may benefit from the shunt when clear evidence suggests the precedence of NPH. Families are encouraged to seek advice from experienced clinicians and obtain a second opinion when necessary.