

When Age Isn't the Problem

Old age didn't come gently to Iris D'Ari. By 79, her thinking had grown fuzzy, she suffered from incontinence, and her gait was so timorous and shuffling that she rarely ventured outside. Classic manifestations of aging, right? Wrong.

Thanks to a physician near her Vermont home who was enough uncertain of his patient's diagnosis to refer her to a specialist, D'Ari ended up at Hopkins. There a neurologist took a look at her test results and suspected not senility, but a condition called adult hydrocephalus—"water on the brain" to laymen. Caused by an excess of cerebrospinal fluid in the ventricles, the condition produces blockages in the brain that interfere with the body's ability to reabsorb cerebrospinal fluid, causing the brain to swell with the liquid.

"It's a condition that can be triggered by any number of problems—infection, trauma, venous disturbances, even brain tumor treatment," explains neurological surgeon Paul Wang. "But because its symptoms—dementia, incontinence and difficulty walking—mimic other problems of old age, there often can be little incentive for a doctor to probe deeper." A CT scan showing enlarged ventricles and brain atrophy could indicate

Alzheimer's or Parkinson's disease, but might also signal hydrocephalus, so "in the end, this is really a diagnosis of exclusion."

To make certain they were on the right track with D'Ari, neurologists here performed a lumbar puncture, drained the fluid from her brain and watched what happened. The results were astounding. Within hours, D'Ari was walking and thinking as she hadn't for months. The evidence was in: She was a candidate for shunt surgery.

"Adult hydrocephalus is not something that can be cured," Wang makes clear, "but we have several shunt techniques that can be wonderfully successful in suppressing the condition." The method with the lowest complication rate involves inserting a catheter with a one-way, programmable valve to move the fluid from the brain into the abdomen where it is reabsorbed. But if scarring or blockages make this approach inadvisable, a shunt also can be inserted from the large jugular vein in the neck to move fluid toward the heart. These methods aren't surefire, Wang emphasizes, but a one-in-five failure rate drops to 6 percent or less after the first year.

What's so rewarding about shunt surgery is its ability to lift a fog of confusion and frailty in an elderly person. For D'Ari, the surgery literally rolled back the clock. She became lucid and mobile, and for the first time in years doctors evaluated her as normal.

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