Drowning in Epilepsy

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Bachman [1] reported two epileptic patients who drowned in the bathtub. Pern [3] analyzed water-related accidents in 149 cases and found that "seizures occurring in the bathtub . . . may be life-threatening"; the fatalities in his series all took place in the bathtub. Our experience with approximately 33,000 epileptic patients over the past four decades is consistent with Pern's—every fatal water-immersion accident occurred during bathing in a tub [2].

In each of our fatal cases, the patient had bathed alone in a tub that was completely or almost completely filled with water. We therefore advise that older patients with epilepsy who bathe alone do so only in tubs with a water depth of no more than 5 to 7.5 cm. Young children, whether epileptic or not, should not be permitted to bathe without the surveillance of a competent adult or an intelligent, responsible teenager. An alternative method consists of showering while seated on the floor of the bathtub with the drain open. We prefer that the patient use a hand-held showering instrument rather than the conventional overhead, wall-implanted type, because the former immediately ceases operation upon release of finger pressure.

We usually advise that epileptic patients not be permitted to shower alone, at least not standing and particularly not in glass- or plastic-enclosed stalls. Several of our patients who experienced a convulsion while taking a shower fell through glass enclosures and severely injured themselves. Two patients in shower stalls fell against the handle of the hot water faucet during a seizure and suffered extensive burns. Several others sustained bruises and lacerations in association with a seizure occurring while they were taking a shower in the upright position. When epileptic patients insist on showering in a stall, we recommend that they be seated on a chair or bench.

Fatalities associated with swimming are relatively rare causes of death in epilepsy. Pern concluded that "with effective supervision" epileptic patients "may swim with confidence," and our experience bears him out. Some of our patients did experience a seizure while swimming, but none drowned.

We allow patients whose epilepsy is controlled and those who have an occasional seizure to swim in a pool with an informed lifeguard or a competent swimming companion. For obvious reasons, we advise against swimming under water and diving into deep water. We discourage patients with rare seizures from swimming in large bodies of water such as lakes or oceans, even with a lifeguard present. We prohibit patients with frequent seizures from any ordinary swimming but do allow them to swim in a pool for brief periods with immediate and constant surveillance.

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References

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Anticholinergics for Parkinson Disease

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A substantial number of patients with Parkinson disease will, over time, begin to escape the benefit of L-dopa therapy or develop a typical fluctuating therapeutic response. It is worth reminding ourselves of the continued usefulness of anticholinergic medications in the L-dopa era.

The combination of L-dopa and anticholinergics is often more effective than either alone, especially in control of the parkinsonian rest tremor. Many patients who fail to respond to one anticholinergic, usually because of side effects, will ultimately benefit from another if a series of these medications is tried. In my experience, benztropine (Cogentin) frequently induces intolerable adverse effects at a subtherapeutic level, whereas other drugs such as ethopropazine (Parsidol) and chlorphenoxamine (Phenoxene) are better tolerated, thereby allowing a higher, more efficacious drug level to be obtained.

One such recently treated man began to deteriorate on maximal L-dopa therapy and was troubled by severe, intermittent resting tremors that shook his entire body. He hallucinated on a low dose of benztropine, had a transiently good response to diphenhydramine (Benadryl), but did well for a number of months on ethopropazine (50 mg three times a day). Another patient, a victim of hemiparkinsonism, had an incomplete response to L-dopa and did no better on a combination of L-dopa and a series of anticholinergic agents. His therapeutic response was limited in each instance because of the early onset of adverse effects. After several trials with different drugs, trihexyphenidyl (Artane) finally worked with few side effects and resulted in sustained benefit for over a year.

The foregoing experiences are frequent enough to justify persistent efforts to find effective drug combinations for victims of Parkinson disease. If adverse effects are dose limiting, it is a good idea to try several of the anticholinergics before making the assumption that no further efforts can be effective.

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