

Risk to Elderly: Hallucinations in the Hospital

No one who knows Justin Kaplan would ever have expected this. A [Pulitzer Prize](#)-winning historian with a razor intellect, [Mr. Kaplan](#), 84, became profoundly delirious while hospitalized for [pneumonia](#) last year. For hours in the hospital, he said, he imagined despotic aliens, and he struck a nurse and threatened to kill his wife and daughter.

“Thousands of tiny little creatures,” he said, “some on horseback, waving arms, carrying weapons like some grand Renaissance battle,” were trying to turn people “into zombies.” Their leader was a woman “with no mouth but a very precisely cut hole in her throat.”

Attacking the group’s “television production studio,” Mr. Kaplan fell from his hospital bed, cutting himself and “sliding across the floor on my own blood,” he said. The hospital called security because “a nurse was trying to restrain me and I repaid her with a kick.”

Mr. Kaplan’s [hallucinations](#) lifted as doctors treated his pneumonia. But [hospitals](#) say many patients are experiencing such inexplicable disorienting episodes. Doctors call it “hospital [delirium](#),” and are increasingly trying to prevent or treat it.

Disproportionately affecting older people, a rapidly growing share of patients, hospital delirium affects about one-third of patients over 70, and a greater percentage of intensive-care or postsurgical patients, the [American Geriatrics Society](#) estimates.

“A delirious patient happens almost every day,” said Dr. Manuel N. Pacheco, director of consultation and emergency services at Mount Auburn Hospital in Cambridge, Mass. He treated Mr. Kaplan, whom he described as “a very learned, acclaimed person,” for whom “this is not the kind of behavior that’s normal.” “People don’t talk about it, because it’s embarrassing,” Dr. Pacheco said. “They’re having sheer terror, like their worst nightmare.”

The cause of delirium is unclear, but there are many apparent triggers: infections, surgery, pneumonia, and procedures like catheter insertions, all of which can spur [anxiety](#) in frail, vulnerable patients. Some medications, difficult for older people to metabolize, seem associated with delirium.

Doctors once dismissed it as a “reversible transient phenomenon,” thinking “it’s O.K. for someone, if they’re elderly, to become confused in the hospital,” said [Dr.](#)

Sharon Inouye, a Harvard Medical School professor. But new research shows significant **negative effects**.

Even short episodes can hinder recovery from patients' initial conditions, extending hospitalizations, delaying scheduled procedures like surgery, requiring more time and attention from staff members and escalating health care costs. Afterward, patients are more often placed, whether temporarily or permanently, in **nursing homes** or rehabilitation centers. Older delirium sufferers are more likely to develop **dementia** later. And, **Dr. Inouye found**, 35 percent to 40 percent die within a year.

"It's terrible, more dangerous than a fall," said Dr. Malaz A. Boustani, a professor at the **Indiana University** Center for Aging Research, who **found** that elderly patients experiencing delirium were hospitalized six days longer, and placed in nursing homes 75 percent of the time, five times as often as those without delirium. Nearly one-tenth died within a month. Experts say delirium can contribute to death by weakening patients or leading to complications like pneumonia or blood clots.

Ethel Reynolds, 75, entered a Virginia hospital last July to have fluid drained that had been causing her feet to swell. She wound up hospitalized for weeks, sometimes so delirious that "she screamed constantly, writhed," said her daughter, Susan Byrd. "I had to get in bed with her because she thought someone was coming and they were going to hurt us," Ms. Byrd said.

Ms. Reynolds ended up needing **dialysis** and surgery after an infection, and she died in September.

"We got her death certificate, and the No. 1 cause of death was delirium," said Ms. Byrd, an ophthalmology nurse. "I was just blown away. As a nurse, I was expecting a quote-unquote medical reason: kidneys, heart, lung, an organ that I could understand had failed, and it wasn't. It was delirium."

Other triggers involve disorienting changes: sleep interrupted for tests, isolation, changing rooms, being without **eyeglasses** or dentures. Medication triggers can include some antihistamines, sleeping pills, **antidepressants** and drugs for nausea and **ulcers**. **Dr. Inouye** said that many "doctors don't know how to appropriately use meds in older people, in terms of dosing" and compatibility with other medications.

Earle Helton, 80, a retired chemist hospitalized after a stroke, ordered his family to "throw a rope over the hedge so he could escape," said his daughter, Amanda. He tried removing his hospital gown, loudly sang "Lullaby and Goodnight," and

doctors had to tie down his hands to prevent him from leaving, said his wife, Ginnie. Only when Dr. Inouye stopped some medications that other doctors had prescribed did he become lucid.

Delirium is sometimes treated with antipsychotics, but doctors urge caution using such drugs.

Delirium can wax and wane, not always causing aggressive [agitation](#).

“It is often the person quietly in bed,” and the condition can linger for weeks or months, landing patients back in the hospital, said Dr. Julie Moran, a geriatrician at Beth Israel Deaconess Medical Center in Boston. “We would have to build 100 more floors to keep everybody until they cleared their delirium. There are times when we could be working round the clock seeing patients with delirium.”

Frequently, geriatricians say, delirium is misdiagnosed, or described on patient charts as agitation, confusion or inappropriate behavior, so subsequent doctors might not realize the problem. One [study](#) found “delirium” used in only 7 percent of cases; “confusion” was most common. Another [study of delirious older emergency-room patients](#) found that the condition was missed in three-quarters of them.

People with dementia seem at greater risk for delirium, but many delirious patients have no dementia. For some of them, delirium increases the risk of later dementia. In such cases, it is unclear if delirium caused the dementia, or was simply a signal that the person would develop it later.

Some hospitals are adopting delirium-prevention programs, [including one developed by Dr. Inouye](#), which adjusts schedules, light and noise to help patients sleep, ensures that patients have their eyeglasses and [hearing aids](#), and has them walk, exercise and do cognitive activities like word games.

Dr. Moran’s hospital removes catheters, intravenous lines and other equipment whenever possible because they can make patients feel trapped, leading to delirium. She said nurses repeatedly assess cognitive function so patients “don’t have smoldering symptoms of delirium for days before they end up yelling and screaming.”

Mr. Kaplan, a biographer of [Mark Twain](#) and [Walt Whitman](#), later jotted notes about his hallucinations, including being in a police helicopter “tracking fugitives with enormous light.”

“Exhilarating until I become one of the fugitives,” he wrote. “End up cold and naked in some sort of subway passage.”

His fall bruised his elbow, leg and wrist, said his wife, the writer [Anne Bernays](#). The next day, “he was gaga till about noon,” and even “looked me in the eye and said ‘I’m going to kill you,’ ” she said. “He didn’t know where he was and didn’t recognize me.”

Fortunately, his delirium was discovered very quickly and he made a very good recovery, Dr. Pacheco said. “But,” he said, “delirium is very disruptive for the patient, family, hospital caregivers.”

As Mr. Kaplan understated later, “It was a lot of unpleasantness.”