

SHOCKING TRUTH

Despite its controversial reputation and Hollywood portrayals, shock therapy is making a comeback in some Valley hospitals. Shocked? Here's a look at the doctors and patients that stand by its use.

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By the time the electrical current surges through Frank Avila's brain, he will be asleep and motionless, paralyzed by medication that will stop his breathing and keep his body from being injured by the seizure he is about to have.

Avila, 56, of Phoenix, has battled depression and bipolar disorder for decades. He's been suicidal and institutionalized. He's tried several psychiatric drugs; none of them worked. Now, he's put his hope in shock therapy and a machine that will shoot pulses of electricity onto the surface of his cerebral cortex.

Avila is in a small room at Maricopa Integrated Health System (formerly Maricopa Medical Center) flanked by two nurses: One is in charge of watching his vital signs, and the other is in charge of his medications and making sure his blood has enough oxygen before they begin.

It is 7 a.m. White-haired, bearded psychiatrist Dr. William James wipes Avila's head with wet gauze before attaching two electrodes in big, square pads on either side of Avila's forehead. Avila holds an oxygen mask to his wide, tan face while one of the nurses counts aloud as the percentage of oxygen in his blood rises: 97, 98, 99, 100.

Avila's hold on his oxygen mask slips as the short-acting anesthetic pumped into his intravenous line kicks in. His eyelids droop, then close. Dr. James gently touches his eyelashes to make sure he is asleep. The nurse injects Succinylcholine, a muscle relaxant that will temporarily paralyze him. His body twitches as the drug takes hold, then it goes still.

The nurse puts a white plastic foam bite block into Avila's mouth to keep him from injuring his teeth or tongue. Dr. James turns to the bright blue and silver machine that sits on a Sears Craftsman tool chest. It is the shape of a large VCR, with wires coming in to monitor brain waves and going out to deliver the shock. He presses the large yellow "TREAT" button, sending a pulsing current that lasts about five seconds through the electrodes into Avila's brain. All of the muscles in Avila's face seize and then relax. Because of the muscle relaxant, his body moves only slightly as his brain seizes. It is only visible in his bare right foot, which was isolated by a blood pressure cuff just below his jeans so the doctor can observe the seizure. Avila's toes twist and contort.

The machine spits out a long, zigzagged record of the seizure, which lasts for less than a minute. In a few minutes, Avila is breathing on his own. By 7:30 a.m., he is awake and lucid. He takes a taxi home.

Electroconvulsive therapy (ECT) – commonly known as shock therapy – has been used, for good and ill, to treat psychiatric patients since it was invented by Italian scientists in the 1930s. For most people, the procedure evokes images of dark days in psychia-



try's past, illustrated most famously in the 1962 Ken Kesey novel *One Flew Over the Cuckoo's Nest*. In the 1975 film version, Jack Nicholson's character is punished by electric shock therapy applied painfully and vengefully while he is fully awake. The procedure is portrayed similarly in the 2008 film starring Angelina Jolie, *Changeling*, which is billed as a true story – even though the film is set in the decade before the procedure was invented.

Proponents say those kinds of media portrayals, which are root-



Dr. William James (left) treats patient Frank Avila with electroconvulsive therapy (ECT), better known as shock therapy, at Maricopa Integrated Health System.

ed in legitimate concerns over the way the procedure was used in the past, have unfairly marred the image of one of the most effective treatments for major depression and other severe psychiatric disorders such as bipolar disorder and catatonia. In recent years, use and awareness of the treatment have been on the rise. Five psychiatrists regularly administer ECT at Valley hospitals, giving thousands of treatments annually. (No state records on the actual number of treatments or patients are maintained.)

“The procedure itself, as things go, is very simple and very safe and the chance of complications is small,” says James, who runs the health system’s psychiatric residency program and instructs on the use of ECT. Still, the popular notions of the procedure as brutal and cruel linger. “Even residents come into training with the *One Flew Over the Cuckoo’s Nest* image of what it is. You dispel it by letting them see it. It is not a horrific procedure; it is actually a peaceful kind of thing.”

ECT is usually not a first line treatment – it is expensive (about \$1,000 a treatment), requires anesthesia and must be performed in a hospital. And it can have significant side effects, including severe headaches and memory loss. (Avila complained of headaches before his treatment, and he was sent home with Percocet.)

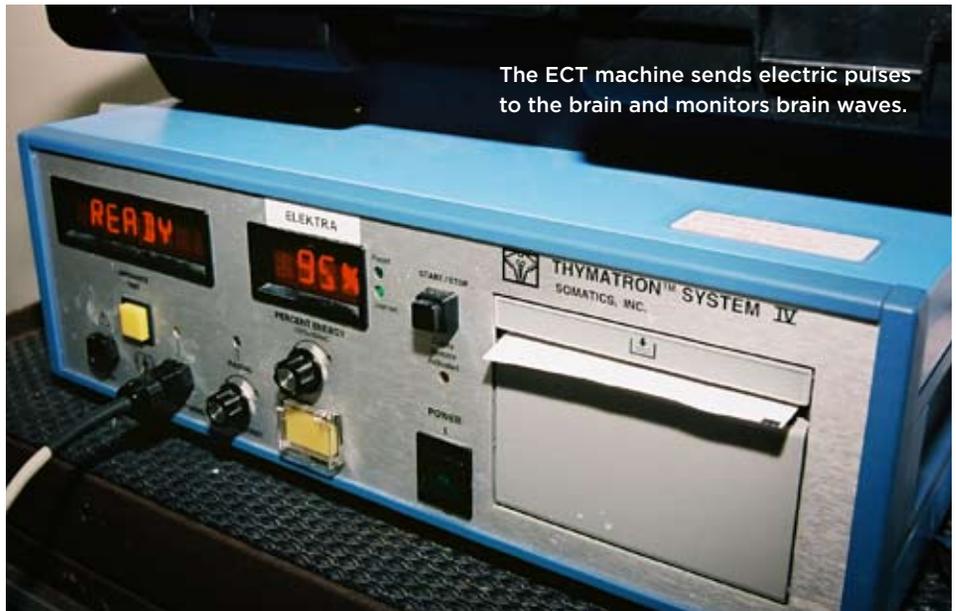
But when the psychiatric condition is acute – because a patient is suicidal or suffers from catatonia and doesn’t eat or drink – or medications have repeatedly failed, ECT can work wonders. Patients seemingly frozen by catatonia can be brought back in just a few treatments, James says. Among severely depressed patients for whom anti-depressants have not been successful and who face hospitalization (which is even more expensive), the procedure is 60 to 75 percent effective.

ECT works by sending pulses of electricity – jolts that are about one-tenth the jolt one would receive from a heart defibrillator – into the brain for a maximum of eight seconds. The electrical current induces a seizure that usually last from 12 seconds to a minute. To treat depression and mania, it is usually administered in a series of three treatments per week, for up to 12 weeks. Because its effects are often not permanent (symptoms can return after a few weeks, months or years), some patients remain on “maintenance ECT” administered once every few weeks or so.

While doctors know how ECT works, they are not sure why. James says it spurs the brain to produce more of some chemicals, including serotonin, dopamine and thyroid-releasing hormones, among many other effects. “These things all correlate. It is all very interesting. But why it works...” he shrugs. “We don’t know.”

Dr. Brian Espinoza is one of the busiest ECT doctors in the Valley, administering several hundred treatments a year through his practice at St. Luke’s Hospital in Phoenix and Banner Behavioral Health Hospital in Scottsdale. Like other doctors and ECT supporters, he says he believes that the public image of the procedure has been helped in recent years by celebrity testimonials, such as those by Kitty Dukakis, wife of 1988 Democratic presidential nominee Michael Dukakis, and actress Carrie Fisher, who have opened up about their use of the treatment.

Today’s ECT is not as harsh as it was decades ago. Better electrode pads mean burns are less likely, muscle relaxants keep patients from fracturing bones during the seizure, and the machines



The ECT machine sends electric pulses to the brain and monitors brain waves.

are more error-proof and have greater ability to customize the amount of charge and other variables for each patient. Different methods, including where to place the electrodes, have helped curb the extent of memory loss faced by many patients. Concerns linger about patient consent – occasionally stories still surface in the news or on the Internet about patients who say they were forced to undergo the treatment. James says he has gotten court orders occasionally to perform ECT on incapacitated, institutionalized patients but has never performed it against anyone’s will.

Stories about forced ECT coupled with some extreme cases of patients who experience profound memory loss and contentions by opponents that it could cause brain damage have kept the procedure one of the most controversial in modern psychiatry.

In January, the U.S. Food and Drug Administration asked for public input on ECT machines. Now the agency is reviewing whether to require ECT machine manufacturers to conduct extensive safety tests on machines that have been in use for decades. Proponents of the treatment say the move is driven by anti-psychiatry factions, such as the Church of Scientology, and aimed at crippling small companies financially to force them out of business and limit the availability of the treatment.

“ECT is a lifesaving treatment – it is one of the few treatments we have that have been definitely proven to reduce suicide,” says Espinoza, who estimates he has given more than 12,000 ECT treatments to more than 2,000 patients over the last eight years. “I do this three times a week, every week, and I see my patients better nine times out of 10.”

Mary Jo West wasn’t sure she could talk about it.

For more than 15 years, West – a former television anchor and local celebrity – has spoken openly about her mental illness. She’s told her story about battling depression to crowds and used it in her work with the mentally ill throughout the Valley. But open up about her electric shock therapy? That, she says, is terrifying.

West is speaking quietly and slowly, sitting in a bistro on Central Avenue just after the Sunday brunch crowd has cleared out. When the waitress comes to the table, West orders a mimosa, thinking it might help. Then she orders another.

“The only time I had fear about talking about my mental illness was in 1993 when I came out of the closet,” says West, 61, who shows up sharply dressed with soft blonde curls framing her face.



While not the first line of treatment, doctors say ECT treatments are 60 to 75 percent effective on some patients.

She tears up and rubs her fingers, nails coated in slightly chipped pink polish, over her heavily made-up face. When she woke up this morning, she says she decided: “I was going to back out.”

Then she went to church. The minister’s sermon was about courage. He commended West on how open she has been over the years about her struggles with mental illness and her work to help others. It’s true she’s talked about her mental illness a lot, she says, but “the ECT part, the shock treatment part – I always talk past it quickly.”

In 1976, West became the first female primetime news anchor in the Phoenix market. She was smart, pretty, blonde and on her way to the top. But like so many people who hide behind carefully crafted public masks, West was battling depression that had dogged her since she was a little girl in Georgia.

“Some of us can be terribly insecure, even as we are driven to be successful,” she explains. “I had this fear I was going to make a terrible mistake on air.”

West was sent by KOOL TV, the local CBS affiliate, to cover the 1980 Republican and Democratic national conventions. During the Republican convention in Detroit, she didn’t sleep the entire week. Then she headed to the Democratic convention in New York, where things got worse.

By the time she returned to Phoenix, she says she had gone for a month without much sleep at all. The mania took over and things went downhill over the next several months. She left her husband and moved into a hotel. She would drive around town at all hours of the night and embarrass those who knew her by talking too quickly and loudly in public. The station sent her out to cover what should have been a simple story – and she couldn’t do it. Then one night after broadcasting the 5 p.m. news, West pleaded to her colleagues for help: “I can’t do this anymore,” she told them quietly.

She was admitted to Camelback Hospital under the treatment of a well-known psychiatrist. She had already tried Lithium and other medications, so the doctor recommended ECT. The thought of shock therapy terrified West, but she was desperate: “I would have done anything legal or illegal to get rid of the darkness. It is like a cloak over your head.

“I just knew I didn’t want to continue living if I were going to feel like this,” she says.

She remembers the day she first tried ECT because of what was in the news. “The day President Reagan was shot, I was being wheeled into a mental hospital, [thinking] ‘How did this happen?’” She believes she had three to four ECT treatments during the time

she was hospitalized – she doesn’t remember much of the whole experience. But she remembers what happened next. “I came out and was back on the air in two weeks, and a miracle happened: Slowly but surely I felt better. I could do stories, doing the best work of my career.” Eighteen months later, West made it to network news, going to New York for CBS.

West continued to struggle with depression for many years, not finding true relief until she was put on Prozac in the mid-1990s. But, she says, if you can measure mental health on a scale of 1 to 10 (on which 10 is well), she was a 0 before ECT. After the treatment, she says she was probably a 3 or 4. “Shock therapy was the break-

through. It was the miracle. It gave me my life back. It made me functional. I don’t want to even think where I would be without it.”

ECT is usually a last resort – the treatment tried, sometimes hush-hush, when all the meds and talk therapy fail. But it doesn’t work for every patient, and some patients complain that it has done them more harm than good.

Paula Loreda, 46, depends on monthly ECT to keep her out of the cycle of depression and chemical dependence that has haunted her since she was a high school dropout-turned-prostitute. But for her friend, Tim W., who asked his last name not be used, ECT was a last-ditch effort to save his life that has succeeded only, he says, in taking his livelihood away.

Loreda sits on a ratty yellow couch on the porch of her east Phoenix duplex, talking about a life of sexual abuse, addiction and bipolar disorder. She has abused alcohol, cocaine, speed and crack since she was a teenager. She would climb out of the darkness, get sober, start to get her life together, then her mental illness would slap her down again, and she’d turn back to booze and drugs.

In 2007, she used her prescription psych meds to try to commit suicide. She spent three days in a semi-comatose state until a neighbor found her. She was hospitalized at St. Luke’s, where she met Dr. Espinoza. The ECT affected her memory at first – she sometimes didn’t remember the treatments but acknowledges that could be from her depression and drug use, too. She was treated three times a week, then once a week, then once every other week.

For the last 18 months, she has been going for treatments once a month. She has had more than 56 treatments so far. Loreda has a boyfriend now – another ECT patient. She volunteers regularly as a peer counselor and leads Alcoholics Anonymous meetings at St. Luke’s – significant accomplishments for a woman who has struggled her whole life to hold a job and, sometimes, even to hold a conversation. Though Espinoza has said she could stop treatment and start up again if symptoms return, she is afraid to stop.

“I hold onto it like a life preserver. I went from seven medications down to two and ECT once a month,” she says. “I’m just not ready to let go yet, because it has been so effective for me. It really scares me about the prospect of falling back into the depression.”

Her friend Tim found no such relief. He was in the same outpatient mental health program at St. Luke’s. In August, he was hospitalized after a major depressive episode. Espinoza, who had been

treating him already for more than a year, recommended ECT.

Tim had ECT three times a week for four weeks while he was hospitalized and continued the outpatient treatment once a week. But the side effects were severe. He would wake up with debilitating headaches that would last 36 hours, despite prescription painkillers.

He discontinued the treatment and began seeing another psychiatrist. Since then, he has realized an even worse side effect: significant memory loss. "It has done terrible things to my memory. There are things in my long-term memory that just aren't there," he says.

Last fall, Tim, an electrician for 35 years, was doing some electrical work for a friend. He couldn't remember simple things, like which wires to put in the conduit or how to bend the pipe correctly. "These were formulas that were seared in my brain," he says.

Espinoza says most patients experience some short-term memory loss. While more significant memory loss has been reported, memories often return after a few weeks. He blames Tim's memory loss on his depression and his history of alcoholism. "Patients with depression already suffer from cognitive impairments," Espinoza says. He says there is also belief that ECT patients who suffer loss of long-term memories may have an underlying neurological problem, such as a genetic predisposition for Alzheimer's disease.

Though it has been months since his treatment, Tim says things are not getting better, and he worries about what this means to his ability to one day get off disability and go back to work. He is 54 years old.

"What do I have to do to regain my memory?" he asks. "Do I have to be retrained from the beginning?"

On a recent morning at St. Luke's Hospital in Phoenix, there are 37 ECT treatments scheduled.

Espinoza, a small man with thick glasses and a dark suit, is taking up the second shift of ECTs for the day. A team of nurses have patients lined up in hospital beds in the waiting area. On the left are patients preparing to be treated, with blood pressure monitors and intravenous lines. On the right, patients are recovering, groggy as they wake up from the anesthesia.

The room is a hodge-podge of patients: an elderly red-faced man in a wheelchair, a middle-aged Latina who used to be catatonic and keeps fiddling with her hospital bed, a gregarious nurse who tried to commit suicide and a young blond man with a ponytail who battles depression, rubs his hands together on his chest as if they are wet and stares off, glossy-eyed, at the wall.

When the nurse-patient notices a reporter, she shouts across the room that she wants to share her story. "I am the ECT poster child," she exclaims. "I don't know why no one ever told me this

existed [before], and I work in the field!" The woman, Cheri Mick, 57, of Sun City, says she tried to commit suicide three months ago. "ECT has saved my life. I can function. I can do the normal everyday things that normal people do."

She says she has been able to reduce her psych meds, which had bad side effects for her. With ECT, she has experienced short-term memory loss but says she can deal with it. She also is nauseous and has a headache afterward, so she takes an anti-nausea medicine and painkillers before the treatment.

"My friends and family can't believe the change," she says. "The benefits way outweigh the bad, the short-term memory loss. I may not remember talking to you tomorrow, but it comes back."

Mick is wheeled into the operating room, where she warmly

greeted anesthesiologist Dr. Ellison Herro. Espinoza, who is not normally the physician who performs Mick's ECT, asks her about her ECT schedule. She says she now gets ECT once a week, but she thinks she can switch to once every two weeks and then, she hopes, once a month. He agrees and makes notes on her medical chart. They recline the bed. Espinoza asks how she has been feeling.

"It seems I get a little better every time," she says cheerfully. "I'm not saying I never have a little bit of blue, but I really don't have it. One of the big things with my major depression is whenever I had responsibility to do something important I would feel it in the pit of my stomach. I haven't had that pit for more than a month."

About two minutes later, after the treatment is performed, she is wheeled out of the operating room. "These treatments can really be life-saving," Herro says enthusiastically as he pushes Mick's bed. By the time the bed is in the recovery area, Mick is awake and moving. Herro, who has been working with ECT procedures for decades, points to the formerly catatonic woman in the corner of the recovery area who fiddles with her hospital gown. Her eyes are glazed and unfocused, as if she is dwelling in a different reality inside her head. Before treatment, "she wouldn't eat, drink or talk," Herro says.

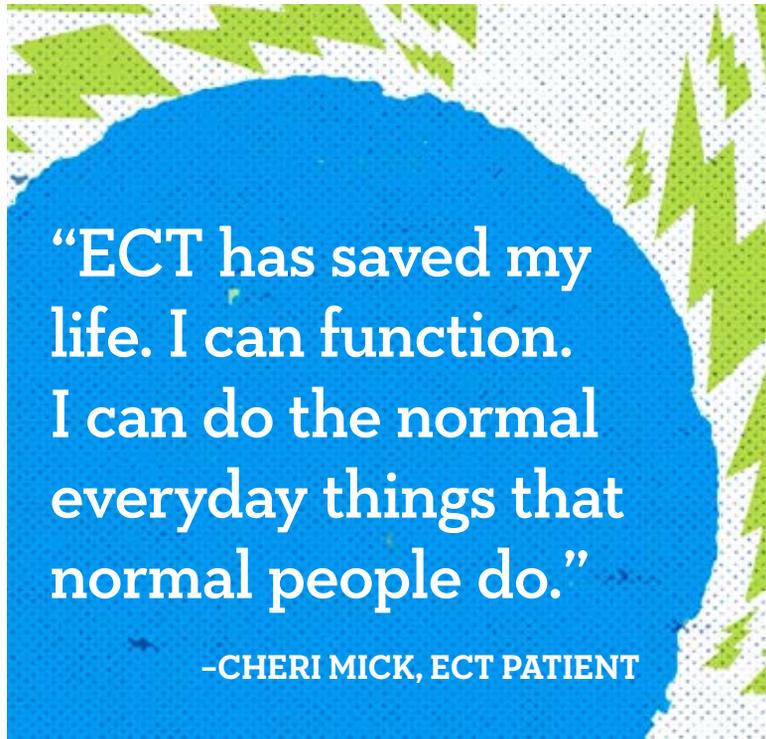
They roll the next patient - the 28-year-old blond, pony-tailed man battling depression - into the operating room. Espinoza asks how he's been since last time and whether he has had any improvement.

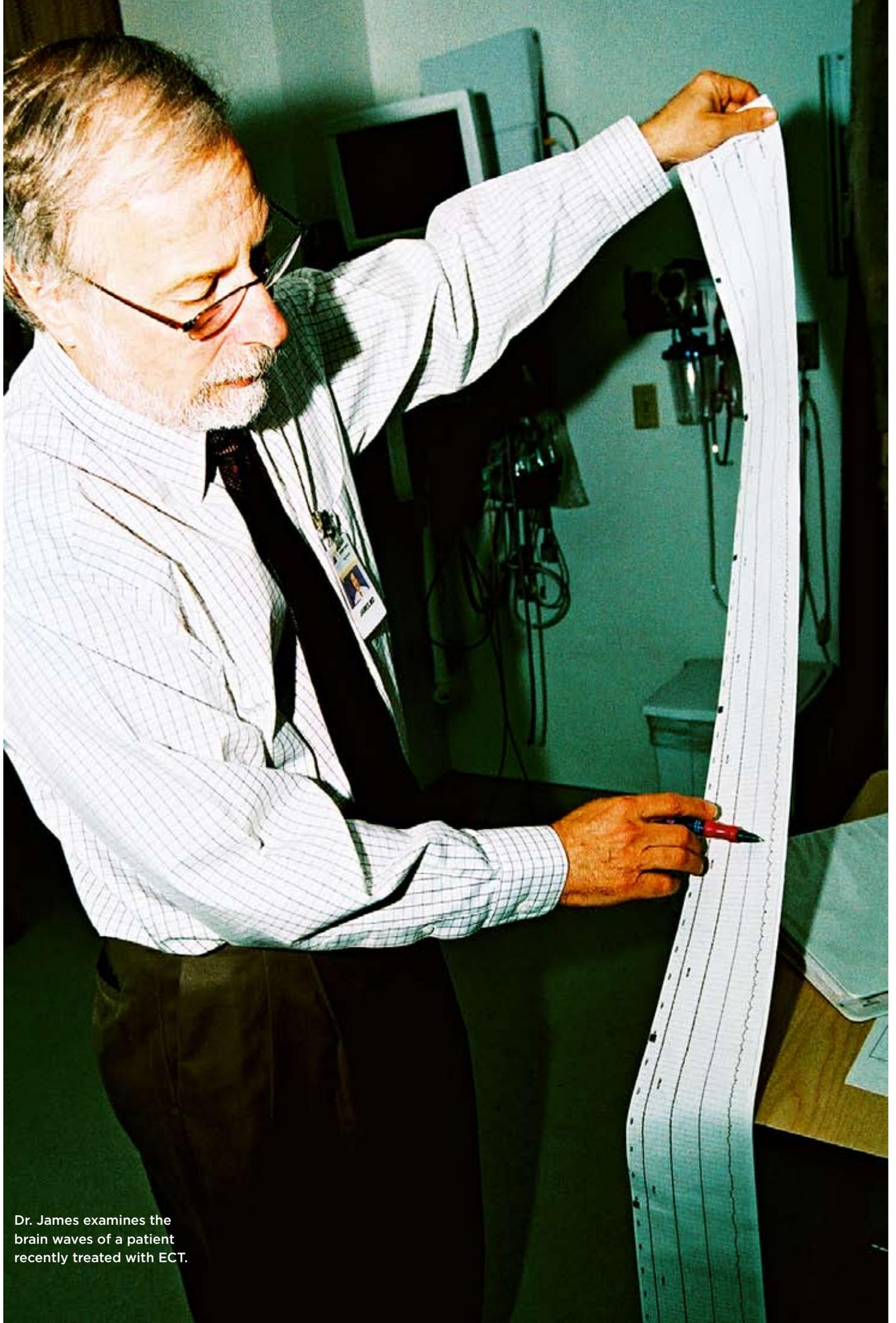
"Not very well," the man says quietly, rubbing his hands together on his chest. "I've had some bad days."

Like Avila, West and the others, the man has placed his hope for a more normal life in a machine and a few short bursts of electricity. But three weeks of therapy hasn't been able to push back the shadows of his depression. He is terrified, and he is losing hope. "I am scared of it not working," he says before his treatment. "I am just so tired of being depressed."

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Dr. James examines the brain waves of a patient recently treated with ECT.