

Photographs by Dmitri Kasterine

the thing they have most in common: their experience with electroshock therapy, the practice of passing electrical current through a patient's brain to relieve symptoms of mental illness. The treatment saved her life, she says. But it very nearly ruined the rest of his.

Considering that electroshock therapy has only been used for half a century, Susan Hale's familiarity with it is almost dynastic. She had her first treatment 30 years ago, soon after leaving the University of California at Berkeley, and her most recent one last month. A heavy woman with a blunt manner and a sharp intelligence, she lives in the Canal District of San Rafael, a brackish alley of relative poverty in one of the richest counties in the nation. Ten blocks from the town's main street, familiar to moviegoers as the real-life backdrop for the film American Graffiti, her tiny subsidized apartment is decorated with photos of her patrician past, and vivid oils of flowers she painted while in an asylum. It seems to be Hale's lot in life to know wealth, security, health, and sanity by proximity, as the birthright she never quite received.

Hale was troubled from her earliest days. She first attempted suicide at the age of five, swallowing two bottles of aspirin when her parents left her at boarding school. "I was manic-depressive," she says. "But usually, I was manic." It was for mania that she saw her first psychiatrist, and received her first shock treatments, when she was 21. "They didn't really work," she recalls. "I left the hospital still feeling pretty much the same. They call it manic. I call it high."

In her early 30s, she suffered a breakdown, left her job as an executive receptionist, and began her slide into a precarious life on the wrong side of the tracks and, often, the wrong side of the law. One night in 1975, she ran amok in her Canal District neighborhood, rampaging through the streets in a red nightgown and tearing a local bar to pieces with a steel knife sharpener. She was detained by the police; the adventure earned her a stay in Napa State Hospital.

"It's a dangerous place," she says. "I prefer it in jail."

But the bottom didn't entirely fall out until ten years later. She remembers the morning. "I'd been to a great party the night before," she says. "The next day I was so depressed I couldn't get out of bed, couldn't wash my hair, couldn't eat, couldn't do anything. I was immobilized. Something in the chemistry of my body had gone haywire. It lasted for two years. I tried everything, every drug known to man, tried therapy, tried taking walks. Nothing worked."

She tried suicide, too—four times. When it was clear that the drug therapies were having no effect and that her life was in danger, her psychiatrist sent her to a colleague, James Mickle, the only doctor in Marin County who still does electroshock, or, as psychiatrists prefer to call it, electroconvulsive therapy—ECT for short.

"Doctor Mickle said that he could save me," Hale says, "and he did."

He booked her into Ross Hospital for a series of six shock treatments. They worked dramatically, lifting the veil that had enshrouded her. In two weeks, she was back home again, her spirits freed.

Hale seemed the model patient for electroshock, waking up easily immediately after each treatment and suffering none of the side effects, such as memory loss, that others report. The depression returned a year later and again several months after that. Each time it was alleviated with a series of shocks. Finally Mickle put her on a regimen of maintenance ECT—one session

each month—that has kept her beyond the grasp of the disease that disfigured her life.

Many of the years that Hale lost to manic depression are lost to Leonard Frank completely; he simply can't recall them. He passes the standard memory test of his generation—he remembers where he was when John Kennedy was shot. But remembering Kennedy's presidency is another matter. Frank is not a victim of mental illness. He is a victim of the cure.

In 1962, Frank was a recent arrival in San Francisco, a young graduate of the Wharton School of Business. He had left his real estate job, grown a beard, and was spending his time studying philosophy and religion. He had, in short, dropped out.

His family was concerned enough to call in a psychiatrist, who found in Frank's long hair and lack of ambition ample evidence of schizophrenia. Armed with that diagnosis, they had Frank involuntarily committed to a series of mental hospitals, including Napa State. He was given 50 insulin treatments, where comas are induced with injections of insulin, and 35 ECT treatments. When he was released, after nine months of incarceration, he moved into an apartment on San Francisco's Webster Street, wondering who he was, and more importantly, who he had been. "I was a brain-damaged person," he says. "I had lost all memory of the two years before the shocks, and pieces of my life going back as far as ten years. In terms of experience and education, I was a twelth-grader. But I'd also lost the ability to concentrate, to learn, and to remember what I learned."

He lives in the apartment still. Over the decades it has become a shrine to his effort to rebuild his life. Bookshelves line the walls to the ceiling, packed two deep with the texts he bought to help him recapture his education, and with rows of. loose-leaf notebooks. Taking down one of the notebooks, he opens it to a closely lined page covered with neatly handwritten words. The words are arranged in columns, and the columns fill page after page, volume after volume. The later pages are typed, the single words evolving into phrases and sentences and complete ideas. They are the attempt of a confused man to organize his mind, the compulsion of an amnesiac to make his thoughts indelible. "I wrote down every little thing," Frank says, and his finger lands on a column of paired words. "See, this page is antonyms: Joy-Sorrow. Fulfillment-Disappointment. Health-Disease. Turmoil-Peace." With each entry, his finger moves deliberately, caressingly down the faded ledger page, but it skips one line, and one couplet goes unsaid: Sanity-Madness.

The room of Frank's apartment intended as a dining area has no chairs and no table. It has been taken over by a formidable bank of filing cabinets—nineteen drawers in all—some of them filled with materials for the further, more aggressive part of Frank's recovery: his ongoing fight, together with other former electroshock patients, to have the treatment banned outright. Their group is called the Network Against Psychiatric Assault. For Frank, the acronym has a certain ironic sweetness.

things have been done in the name of treatment that would never be allowed now." For Mickle, as for other doctors who use electroshock therapy, Susan Hale represents the enlightened new age of ECT, and Leonard Frank its embarrassingly brutal roots.

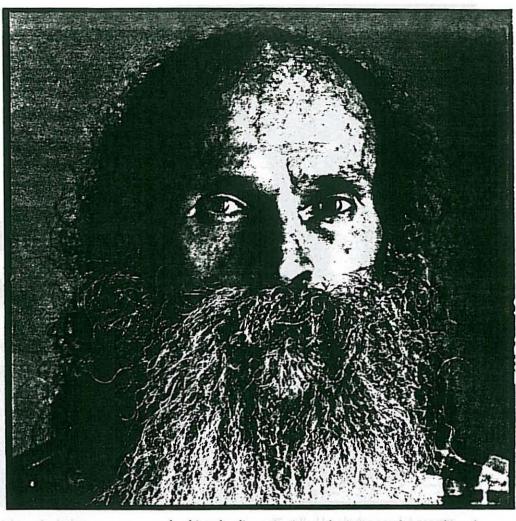
That history of abuse, most agree, dates back to April 1938, when the technique was first tried by its inventor, Italian psychiatrist Ugo Cerletti. For years, doctors, inspired by the observation that epileptics seem immune to schizophrenia, had been inducing epileptic-like seizures in mental patients by injecting them with toxic doses of camphor or Metrazol. Cerletti had devised a more modern and convenient way to do the same job, employing electrified tongs adapted from the ones used to stun hogs in the Rome slaughterhouse.

His premier subject, that April day, was a transient known only as S.E., who had been arrested in a train station, wandering aimlessly and speaking gibberish. He was hospitalized only for observation, and knew nothing of the experiment that was about to be performed on him. The tongs were applied to his head and 80 volts sent through his brain. He jerked but did not convulse. When the doctors raised the possibility of trying again, the man's incoherence suddenly disappeared. He said emphatically, "Non una seconda. Mortifiere": "Not another. It will kill me." Cerletti upped the voltage to 110, and S.E. became the first human to suffer a grand mal seizure intentionally induced with electricity.

Cerletti advertised the therapeutic benefits of his new technique, and within two years electroshock had reached the United States, where it met with instant popularity. By 1948, roughly 85 percent of surveyed institutions said they had used one or another form of the chemically or electrically induced shock therapies, and were crediting them with astounding cures of conditions ranging from schizophrenia to homosexuality to severe backaches.

The miracle had its dark side. A few patients were dying on the treatment table. More commonly, limbs,

teeth, or backbones were shattered by the intense muscle contractions of the seizure. Instead of the series of six to 12 treatments now commonly prescribed, patients sometimes received hundreds of shocks, and in a few cases more than a thousand. Lucino Bini, a psychiatrist who had helped Cerletti with the experiment on S.E., recommended giving certain patients many shock sessions a day. He termed the technique "annihilation," because it produced the same sort of general amnesia as a lobotomy. Hospitals learned to use the shock box as a control measure, threatening noncompliant patients,



"I was a braindamaged person. I had lost all memory of the years before the shocks. In terms of education and experience, I was a twelfthgrader. But I'd also lost the ability to concentrate, and to remember what I learned."

-Loonard Frank

shocking the disruptive into submission, and even taking the devices on house calls to subdue people resisting their trip to the asylum.

But the most persistent complaint, then as now, was that, even when properly administered, ECT destroyed memory, leaving patients with altered personalities and missing pasts. "What is the use of ruining my head and erasing my memory?" Ernest Hemingway asked after his 11 shock treatments at the Mayo Clinic in 1961. "It was a brilliant cure, but we lost the patient." Days after he was released from Mayo, Hemingway committed suicide.

By the early 1970s, the technique had fallen out of favor with many hospitals. Most states enacted laws restricting its use without informed consent; several even required a court hearing before an incompetent patient could be shocked. In 1982, electroshock was banned outright by the voters of Berkeley, California, thus becoming the only medical procedure ever outlawed by municipal referendum. The leader of the Berkeley campaign, Ted Chabasinsky, was himself a shock veteran. Unlike the typical electroshock patient-half of whom are over 65 and two-thirds of whom are women-Chabasinsky was only six years old when he underwent ECT.

"That outrages people," he says. "They know intuitively it's wrong. But if it's a legitimate medical treatment, why shouldn't it be given to children?" His experience gave him a natural edge in the ECT debate. "I had a certain air of moral authority," he says. The anti-shock campaign spent its war chest of two thousand dollars and won by a larger margin than



any candidate on the local ballot. The ban lasted 40 days before the courts struck it down.

For many uses, hospitals replaced shock with prescriptions for Lithium and Thorazine and antidepressants such as Imipramine, which calm the tormented behavior of patients without forcing them to undergo the violence of seizures. But some psychiatrists believed that even with this formidable new pharmacopoeia, there remained a need for shock. "You can depend on drugs to work in about sixty or seventy percent of cases," says Richard Weiner, a psychiatrist at Duke University. "But in the right population, ECT has an eighty to nine-

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- Susan Halo

ty percent success rate. It's used because it works."

There is no good accounting of exactly how much it is used.

There is no good accounting of exactly how much it is used. The American Psychiatric Association has estimated that about 33,000 Americans a year are treated, but others think that may be low. "I'd say a hundred thousand," says Max Fink, a psychiatrist with University Hospital at Stonybrook, New York, and the man sometimes called the dean of American electroshock. Fink believes that on its 50th anniversary, the treatment is in the midst of a renaissance. "Equipment sales are up," he says, "and the number of ECT articles in

professional journals has more than doubled over the last dozen years, from a low of 125 a year to almost 300. This kind of attention isn't given to a decaying therapy."

Renaissance notwithstanding, Glen Peterson, a psychiatrist in Oakland, California, feels that the lingering resistance to the treatment is an outrage. "I see people in hospitals who have been blocked up, not responding to any drugs, for several years, who have gone home after a series of ECT," he says. "There are other patients who have lethal complications with drugs, who avoid ECT because of the stigma. It's a ridiculous situation. If you have a life-threatening condition, ECT should be immediate."

The treatment is no longer prescribed for the gamut of psychological problems. Despite those first two decades of rave reviews, shock alone is now considered ineffective against most types of schizophrenia. Its almost exclusive target is depression. Not the down-in-the-dumps garden variety known to everyone over the age of five, but the more mean-spirited, all-consuming, suicidal type that shadows people like Susan Hale.

"It's worse than being dead," Hale says. "It's like being at the bottom of

a dark pit, and there's no way out. If ECT hadn't worked, I was going to go out on the street and get some Seconal and a quart of fine Scotch and kill myself."

Faced with an ailment this painful, doctors are especially grateful for ECT's speed—relief sometimes begins after a single five-minute treatment, instead of in the two or three weeks that drugs require.

"Depression can be a fatal illness, even aside from suicide," says James Mickle. "People can't eat, can't take care of themselves, they become too weak to treat. ECT is very good for breaking what I call intractable depression. It's a first step. The second step is to keep it from recurring. I'm one of those people who believes deeply in it because I've seen it cure people who would otherwise be ready for the back wards."

EMEMBER Cuckoo's Nest?" the orderly asks. He is dressed in short-sleeved green scrubs and rubber gloves, and he is pasting electrodes onto the forehead of an elderly woman lying on a waist-high gurney. "When people first think of ECT, that's usually what they think of—you know, all those heavy convulsions. Well, it's not like that anymore." And in fact, there are in the room not the three or four nurses that in olden days were positioned to "ride" the patient—restraining her during her 30 to 90 seconds of neural and muscular mayhem—but two. Two orderlies and, between them, the woman on the gurney, over whom the conversation flutters like chatter over a dinner table. "I know," the other responds, as she sticks three electrodes to the patient's ab-

domen. "It wasn't the technique I minded so much. It was the brutality of it, the inhumanity." She checks the catheters in the back of the woman's right hand. "Thank God it's not like that anymore."

"Oh, basically it's not any different," the first orderly says. "But the patient has a much easier time of it."

The patient, in this case, lifts her left arm up to her face and, with anxious fingers, squeezes the bridge of her nose.

"We're ready," the orderly says, and he taps against the wall the familiar tattoo-"Shave and a haircut"with his latex knuckles.

The answer comes back through the wallboard: "Two bits," and soon Glen Peterson appears in the doorway and walks to the patient's side. He is a tall, mild-looking man in a blue suit and sandals, a stethoscope draped around his neck. He looks her over quickly. The wires from her abdomen are connected to a heart monitor mounted on the wall, which emits a reassuringly regular pinging. The electrodes on her head are connected to another machine, a box the size of a toaster oven, one side of which measures and records brain waves. The other side of the same box is marked ECT, and has wires leading to a pair of hand-sized wands with round metal pads on the end.

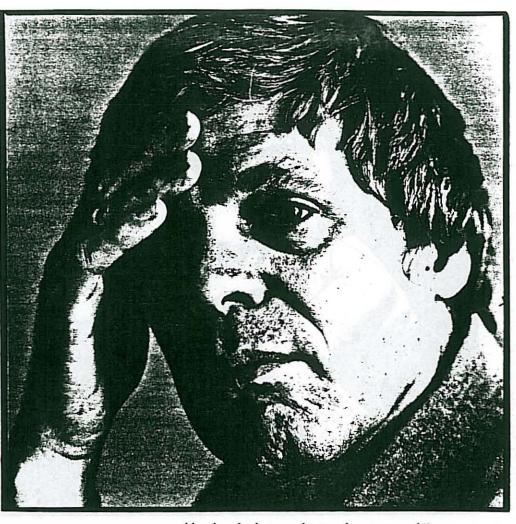
The orderly rubs conductive jelly on the patient's temple as Peterson empties a large syringe into her catheter, the first of two injections that will anesthetize the woman and keep her immobile, making her seizure an internal event with few outward dramatics and no chance of broken bones. This is the major modification in "modified ECT."

"Just relax," Peterson says in a hypnotist's honeyed voice as he listens to her heart through the stethoscope. "You'll start feeling dizzy." Her jaw begins shaking, an effect of the anesthesia, and soon her head lolls. The

orderly inserts a rubber disk in her mouth to insure that there is no damage to her tongue and teeth; the black end of the disk protrudes from between her lips like the nozzle of a hose.

Peterson gives her the follow-up shot, then lifts her leg and tests her reflexes with a rubber mallet. There is no response.

"This woman had her first mental illness in her twenties," he says. "She's in her sixties now. Her liver and spleen are damaged, so as a result it's not safe for her to have certain drugs. This treatment is the only recourse she has left. Today we'll give her, oh, probably more than a hundred joules,



"I was a 'disturbed' child. My symptoms were that I ran away when the older kids bullled me and I left my tricycle In the road. After the shock I couldn't remember my way around the neighborhood. I didn't know my best friend's name."

-Ted Chabasinsky

roughly a hundred watts of power for one second."

He steps to the front of the gurney; taking an ECT wand in each hand, he holds one to the woman's right temple and the other to the top of her head. This placement represents another frequent modification in the new ECT-called unilateral because it concentrates the current in one half of the brain, it supposedly causes less memory damage (and according to some doctors, is less effective), than the bilateral method, in which an electrode is placed on each temple.

With his thumb, Peterson presses a trigger on the right wand and a dull thud resonates through the room, the hollow sound of a dropped book. For as long as it takes Peterson to put away the wands, there is no reaction from the shape on the gurney. Then her arms break out in goose bumps, and her seizure begins. Her head seems to strain against the bed, and her face flushes intensely. The orderly holds an oxygen mask over her mouth, pumping her with air from a large plastic bottle. Her feet begin a frenzied, jiggling dance. The heart monitor's beeping races irregular and wild.

After 70 seconds, timed carefully by a nurse with a stopwatch, the episode is over. The strain goes out of the unconscious body and the panic goes out of her pulse. The neck relaxes, and soon she is snoring noisily. Peterson pulls an EEG readout from the machine, a running chart of the patient's brain waves, and tears off a two-inch section showing the four sawtooth jolts of the shock itself and the irregular exuberant swings of the seizure. He jots the patient's name on it, and as she is wheeled out to make way for another, he leaves for the



adjacent room, the provisional office he inhabits three mornings a week, the mornings he gives up the talking cure for the electrical one.

"Most of my patients are referrals," he says, dropping the scrap of EEG paper on his desk. "There aren't a lot of doctors who do this anymore. I'd say maybe fifteen or twenty in the Bay Area, out of a couple thousand psychiatrists. There's a stigma. There's a lot of bad press.

"Even though there's no objective test to show there's any memory loss from this technique, the protesters are still out there calling us Nazis and brain burners. They can always find some doctor willing to come up to the

state capital and ignite a Brillo pad with an electric spark or cook an egg or something. As if that had anything to do with it."

RITICS, unimpressed with the reformed reputation of the new ECT, do not see Leonard Frank as a relic of the psychiatric Pleistocene; rather, they view his experience as a dramatic example of what can happen with even the most refined of modern techniques. "How do I know these techniques aren't new?" Peter Breggin asks. "Because I was giving modified ECT at Harvard in 1963, and it's the same old

I didn't recognize my roommate, or where my clothes had come from. I read articles I'd written in magazines and didn't know what they were about. There is no way I couldn't feel Inferior to the

-Linda Andro

"I went home. person I used to be." thing. It's as dangerous as it ever was." Breggin is perhaps the foremost among ECT's critics, a psychiatrist who takes time out from his Bethesda, Maryland, practice to speak against shock at conventions and on talk shows and to testify against it in court. "ECT is inherently damaging to the brain," Breggin says, "for a very simple reason. The combination of electricity and seizures is bad for the brain."

While shock doctors maintain that Breggin's accounts of the effects of shock therapy are misleading and anecdotal, they have a harder time refuting his observation that there is no solid theoretical explanation for ECT's effectiveness.

"We don't know exactly how it works," Richard Weiner says. "But we know a lot. We know that ECT causes biochemical changes in the brain." Research on the matter is so tentative that doctors are free to subscribe at will to any of a handful of competing notions: that neurotransmitters such as norepinephrine are affected, or that the seizures change the way the brain receives chemicals that regulate perception of pleasure and pain. "I have the only really good mainstream theory," says Max Fink, good-naturedly discounting the

efforts of friends and colleagues. "The seizure causes the brain to produce a hormone which regulates the levels of other bodily hormones essential to our well-being. It's a magic substance, somewhat similar to insulin for diabetics. We haven't found this hormone yet, but I've made up a name for it. I call it

'antidepressant.' "

Critics have a simpler explanation. "It's so uncomplicated, it's embarrassing," says Breggin. "ECT causes organic brain syndrome. It's in DSM-III. Look it up." DSM-III, the diagnostic bible of the American Psychiatric Association, describes organic brain syndrome as any generalized disorder of the brain. One common feature of brain damage is a temporary delirium, feeling of well-being, and feeling of release from physical or mental ailments. Another feature is temporary or permanent amnesia.

"All ECT does," John Friedberg concurs, "is produce brain damage, which some people like." Friedberg, a neurologist in Berkeley, California, has been an outspoken critic of ECT ever since he first witnessed it while in medical school in the late 1960s. "I'm a libertarian," he says. "If you want brain damage, it's your prerogative. It's what people get with alcohol, or drugs. But there's no more effective way than ECT. It's more effective than a car wreck, or getting hit with a blunt instrument. It's more effective than anything except possibly a good case of herpes simplex encephalitis with massive hemorrhaging."

Ironically, many early users of shock therapy would have agreed with Friedberg. "I think disturbance of memory is

probably an integral part of the recovery process," Abraham Myerson reported of his experience with ECT in 1942. "It may be true that these people have, for the time being at any rate, more intelligence than they can handle and that the reduction of intelligence is an important factor in the curative process." Others conjectured that ECT was somehow able to cause selective brain damage, killing only those neurons that were diseased or problematic.

Their modern colleagues would disagree—vehemently. "The possibility of brain damage is absolutely refuted," Glen Peterson says, "by brain scans, by neuropsychological studies, by autopsies, by animal studies, and by analysis of cerebrospinal fluid and blood chemicals. There are certain chemicals that leak from damaged nerve cells that aren't detected in ECT patients."

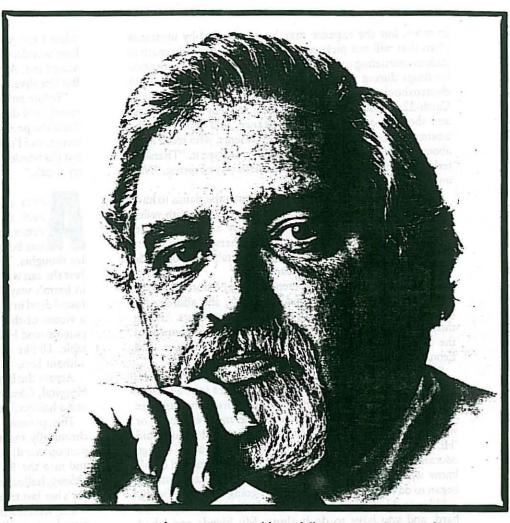
Other doctors, while admitting that the evidence against brain damage is inconclusive, feel the burden of proof should be on the other side. "I can't prove there's no brain damage," says Max Fink. "I can't prove there are no other sentient beings in the universe, either. But scientists have been trying for thirty years to find both, and so far they haven't come up with a thing."

Nor are doctors convinced by tales of permanent memory loss. "There may be some spotty losses of the time during the treatment, and sometimes of a period before the treatment," Weiner says. "And there is absolutely no evidence that the ability to learn new things and then recall them is impaired. Where there is anecdotal evidence, it is not borne out by controlled studies."

The anecdotal evidence runs both ways. There is Norman Endler, a psychologist living in Toronto, who was repelled by electroshock when he witnessed it as a student in the 1950s, but who decided to undergo a series

of treatments to help his depression in 1976. His book about his recovery, Holiday of Darkness, tells of his total lack of permanent side effects. And then there is Marilyn Rice, who underwent a series of eight bilateral treatments during her stay at the Psychiatric Institutes of Washington, D.C., in 1973. She lost one complete year, parts of the previous two decades, and the "vast edifice" of her vocational knowledge. As a result, she also lost her high-level job as an economist with the Commerce Department.

There are, doctors admit, a lot of people who think they



"I was convinced I would be an emotional cripple the rest of my life. After the seventh session of electroshock they gave me coffee and cookles and I went back to being chairman of the psychology department of York University."

-Norman Endler

have memory problems following ECT. Proving the provenance of such problems can be difficult, since presumably they may have been caused by the patient's mental instability, not by the cure. It's normal, doctors point out, for a person who has had shock to be more sensitive to the least sign of memory trouble, elevating the importance of normal, everyday lapses.

Such uncertainties do not dissuade Marilyn Rice. She has joined with 224 other former shock patients in the Committee for Truth in Psychiatry, which lobbies for strong informed consent laws. Recently it has been fighting the efforts of psychiatrists to have the FDA change its classification of shock machines. Currently, the machines are listed as Class III, a category including devices like pacemakers that can be lethal if they misfunction, and others deemed experimental or dangerous. "We aren't trying to ban ECT," Rice says. "I know what it means to have a breakdown—every organ and gland in your body is either overworking or not working, your heart is pounding, every nerve is sending the wrong signals. For a state of physical suffering of nervous origin, ECT relaxes the mind. It's like a cocktail multiplied by a million. The trouble is, nobody has told the truth about this. There is always permanent memory loss. It's something the patient has to know before giving consent."

Consent, however, can be a tricky business in psychiatry. Patients who refuse shock are faced with the specter of being evicted from expensive private hospitals when their several months of insurance run out, only to languish in state institutions. A series of ten electroshock treatments can run \$12,000

or more, but the expense may be reimbursed by insurance plans that will not pick up the tab for lengthier alternatives such as counseling or extended hospital rest. Patients are often on drugs during the time they must make decisions about electroshock. They are further faced with a psychiatric Catch-22: Those who reject treatment are denying their illness and showing a pathological resistance, and thus need the treatment more. According to some patients, who recall lying about the benefits of the technique just to escape it, "Thanks, I feel better" may be, for some, the modern way of saying, "Non una seconda. Mortifiere."

Linda Andre knows these issues by heart; she claims to have been coerced into a series of 15 shock treatments with veiled threats, while on drugs, and without any accounting of its dangers. Citing the consent issue and others, she has filed a \$110 million suit against New York Hospital, her doctor, and the manufacturers of the ECT machines.

Last fall, at the annual conference of the National Association for Rights Protection and Advocacy, she addressed a group of psychiatric support workers and ex-patients. Among those listening to Andre and others in the gilded basement of the Portland, Oregon, Marriott were Peter Breggin and Leonard Roy Frank.

"A set amount of shock has a very different effect on different brains," Andre said. "When I was released in 1984, I was told that my memory deficit would cure itself in about six weeks. I went home. I didn't recognize my roommate, or where my clothes had come from. People called up and said 'Hi,' but I didn't know who they were. Did I have a college education? I read articles I'd written in magazines and didn't know what they were about. After six weeks had passed it began to dawn on me that this wasn't going to get any better.

"It's possible to build a new sense of self after shock, but it's hard, and you have to do it alone. My friends and I had nothing in common anymore. We didn't have a shared history, because I didn't know the history. I was ashamed. I can't think like I used to, can't remember new ideas easily. There's no way I couldn't feel inferior to the person I used to be.

"Do you know what they called me in grade school?" she said. "'The Brain.' Isn't that ironic?"

After her speech, Andre left the hotel to take in the sights. She had been excited about the chance to get a glimpse of Oregon, until friends told her she'd been to Oregon before.

NDRE'S LAWSUIT may make hers the most celebrated case of ECT during the next couple of years. Mary Rose's is more typical for its quiet obscurity. The exteacher from eastern Pennsylvania has no pulpit, and wants no audience. Mary Rose is not her real name, and she talks about her experience only with her privacy guaranteed by the anonymity of a phone line.

"I don't believe I'd be alive today, except for ECT," she says. Her suicidal depression was alleviated with two series—25 treatments in all—of electroshock. She regained her sanity, but lost 10 years and believes she lost some thinking ability as well. She has no memory of her sickness, and no memory of her first marriage, either. But she'd do it all again.

"It's pretty hard to accept the memory loss," she says. "My husband teases me all the time, tells me what a great first date we had. I can't read well now. I can't tell you much about current events. It's hard to get me into an intelligent conversation. But I function. I didn't lose my creativity. I can tell you

when I got pregnant, and I can tell you about my new son, how wonderful he is. I have new friends, and my old friends accept me. And I have my family. I've lost a lot of my life. But I'm alive.

"Before anybody takes ECT," she says, "it should be the last resort, and they should be made aware of what can happen. But if the pain is that bad, it's an option. For me, it was worth trying, and I'd do it again, but I wouldn't do it lightly. If you're out the window and standing on the ledge, come back in and try shock."

WEEK after the Portland conference Leonard Frank is back in San Francisco, attending to his correspondence, spending his morning before the computer he has bought to help him index his ideas and catalogue his thoughts. Ten miles to the north Susan Hale is coping as best she can with the latest tragedy of a life that has been spent in harm's way. Jeff, her companion of three years, has been found dead in the back seat of his car; dead after a long illness, a victim of the alcoholism he was never able to shake. His parents send Hale a photograph of him, and she puts it on the table. Unlike the last crisis, she will have to face this one without him.

Across the bay in Oakland, in the basement of Providence Hospital, Glen Peterson hears the knock on the wall. "Shave and a haircut," it calls. And he answers, "Two bits."

This patient, like the last, is female and elderly. "She's chronically mentally ill," he says as he hustles through the post-op ward, past the gurneys of reviving surgery patients, and into the ECT room. "Two weeks ago she was violent, kicking, hallucinating. Now she's calm. She feeds herself. To-day's her last treatment."

The woman is especially reliant on ECT because she has neuroleptic malignancy syndrome—a rare, sometimes fatal reaction to antipsychotic drugs—that has caused her feet and hands to shrivel and curl. Standing beside her gurney, Peterson holds one of her little fists and asks her, "Can you tell us what caused your hands to shrivel up?" She ignores him and he repeats himself more loudly. "Do you remember what I told you about why your hands shriveled up?"

"No," she says in a shy, tiny voice.

"Do you remember?" he persists, trying to elicit even a modicum of conversation, as her head, with the electrodes perched above each eyebrow, rolls back and forth on the pillow. "Do you remember? Do you remember?"

Anesthesia is injected, and soon it takes hold. Peterson lifts her left leg, with a blue terrycloth sock on the foot, and taps her knee occasionally with the mallet until it ceases to respond. He moves to the front of the gurney and places the electric wands gently against her head.

The goosebumps start and the face strains. Roseate clouds of blood blossom and fade under the exposed skin of her abdomen. The sound of her electronically monitored heartbeat fills the room and the post-op ward, where other patients awaken groggily from their various misfortunes, and it fills the vacant office where the scraps of EEG paper, tiny messages of desperation and hope, the tattered evidence of grand mal seizures intentionally induced, litter the desktop like so many fallen leaves. The sound of her heartbeat gallops frantically for a while, and in a while, it quiets down.

Russ Rymer is a contributing editor.