

Hypnotism Under the Knife

Hypnotism has been called 'a believed-in fantasy,' and believers are using it as an anesthetic in surgery. It is, literally, all in the mind.

By JOANNE SILBERNER

The young woman lies on an operating room table, alert and listening intently to Frank Marlowe, a Philadelphia plastic surgeon and otolaryngologist. Several weeks before the surgery, Marlowe had a 20-minute hypnosis session with the patient. He put her in a trance and gave her a posthypnotic suggestion — that when he said “deep deep relax,” she would completely relax and spread her fingers as a signal that the surgery could begin.

Now he softly tells the patient what will be going on during the operation and says the passwords. The patient, a nurse, has wanted a nose job for years but has avoided it because of fear of anesthesia. Marlowe tells her she won't have any discomfort. Nor, for that matter, will she receive any conventional anesthesia. Her fingers spread slowly, her eyes close and the operation begins.

Marlowe injects her nose with saline solution, using a large-gauge needle to show that she is not reactive to pain, and inserts a scalpel into her nostril. He carves out several pieces of cartilage. Then he gives the nose a smart rap with hammer and chisel, pulls out several bone chips, carefully sews up the tissue inside the nose, packs it with gauze and tapes it into shape.

Marlowe tells her the operation is over. The patient smiles and moves herself onto a gurney for the trip to the recovery room.

While the medical literature includes an occasional description of hypnosis being used as the primary anesthetic in a major surgical procedure — it has reportedly been used for everything from dilatation-and-curettage to open heart surgery — proponents of the practice say its real value is as an adjunct to chemical anesthesia, relaxing the patient and allowing less anesthesia to be used, thus shortening recovery time. But even as an adjunct, they say, hypnosis has for the most part gone unrecognized by the medical profession.

Neither the American Society of Anesthesiologists in Park Ridge, Ill., nor the American Society of Clinical Hypnosis in Des Plaines, Ill., has exact figures on how widely hypnosis is used in surgery, but at least some of the clinical society's 3,900 members use it for surgical anesthesia. In

1972, the American Medical Association's Council on Mental Health stated that hypnosis has a “recognized place in medicine” and is a useful technique in treating certain illnesses when used by qualified personnel, but didn't refer directly to anesthesia.

Nevertheless, its practitioners say there has been a slow but steady increase in the use of hypnosis in surgery. One possible reason is the renewed interest in acupuncture, says Marlowe, who is on the faculty at the Medical College of Pennsylvania. Like hypnosis, acupuncture's exact physiological basis is not understood, and its efficacy may rely in part on faith in the procedure. “I think acupuncture is largely hypnosis,” Marlowe says.

Hypnosis in surgery — both formally putting someone in a trance and informally suggesting a person will not feel much pain — “is not done as much as I'd like,” says psychologist Harold J. Wain of Walter Reed Army Medical Center in Washington, D.C. “I think it's one of the most outstanding adjuncts [to anesthesia] we have,” he says.

Wain has been studying the use of hypnosis in the emergency room, where he has found that many patients are already in a trancelike state, making formal induction of hypnosis “a snap.” Standing in its way, Wain says, are misperceptions that inducing a trance is unreliable, difficult and time-consuming.

Hypnosis as anesthesia is something utterly unfakeable — the ultimate placebo effect. Though the exact physiological mechanism by which it works is unknown, medical hypnotists say it relies on two factors: that painful stimuli in surgery are not nearly as great as some people imagine, and that the mind can be trained to ignore them.

Many surgical procedures, though gory, can be “very trivial procedures as far as pain goes,” says David Mayer of the Medical College of Virginia in Richmond, who did a study in the late 1970s showing that hypnosis can double a person's pain threshold. In some cases, once you get past the pain receptors in the skin you're home free: Many organs have few if any nerves of feeling. The brain itself, for example, is completely insensitive to direct



Ed Murray/MCP

Frank Marlowe

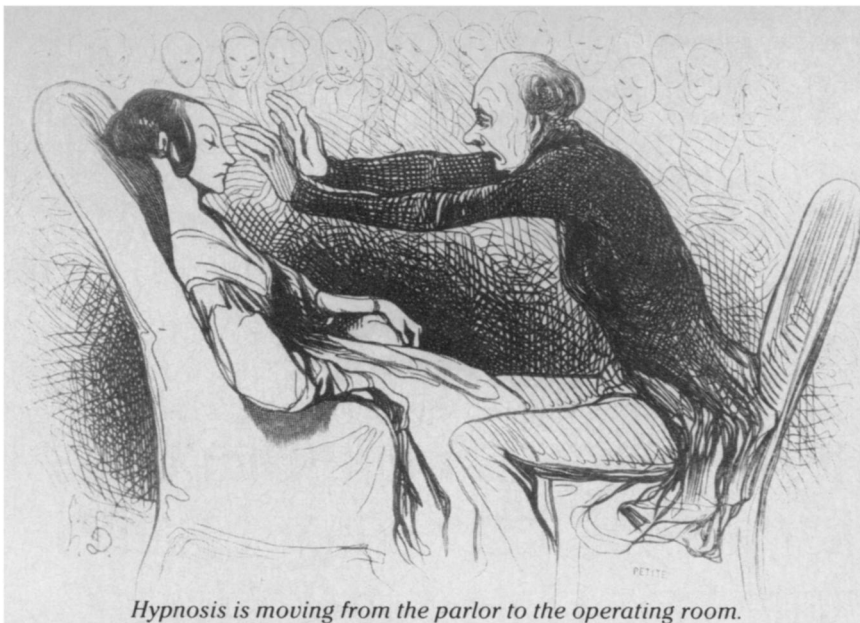
painful stimuli.

Hypnosis addresses both the psychological and physical aspects of pain. It alleviates the fear that intensifies physical pain, and it sets the powers of the mind against the actual pain stimulus. It is “within the capability of the human mind to not appreciate pain,” says hypnosis researcher Martin Orne of the University of Pennsylvania. One example, he says, is a boxer who doesn't realize he has broken his hand until the final bell is sounded.

How can this happen? Human studies have shown that hypnosis does *not* work via the pain-relieving opiates released by the brain. The effects of hypnotism can't be prevented with the opiate-inhibitor naloxone, whereas acupuncture's effects usually are, according to Mayer. Work that is still in progress suggests, but has yet to prove, that during hypnosis there may be changes in the way the two hemispheres of the brain are activated, says Orne.

Though hypnosis derives from the Greek word for sleep, it is exactly the opposite, Marlowe says. “It's a very focused, intense form of concentration.” The power of that type of concentration is ancient — it is what enabled early warriors and hunters to ignore injuries until after the battle or chase was over.

In 1847, hypnosis was mentioned in the medical literature when a Scottish surgeon published a description of its use in



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Hypnosis is moving from the parlor to the operating room.

345 major operations in India. He cited an operative mortality rate of 5 percent, compared with a then-usual 40 percent. The difference, he believed, was in the type of anesthesia. In those days, patients were doped with alcohol and tied down; the physician operated as quickly as possible, often accompanied by the screams of the patient. With hypnosis, the patient remained quiet and the surgery could be conducted more slowly and carefully.

But toward the second half of the 1800s, as interest in hypnosis began growing, ether was introduced. Because hypnosis had fallen into the hands of faith healers and carnival showmen, while ether was promoted by surgeons at teaching hospitals, the chemical form quickly took precedence.

Today's resurgence has great potential, practitioners note, since most people — about 75 percent by Marlowe's estimate — can be hypnotized enough for surgery. Only about 10 percent of people can be put in a deep trance. Marlowe and others have found that people willing to trust in the process — children, teenagers and emergency room patients, as well as athletes and others with a practiced ability to concentrate — make the best subjects. Says Orne, "Many of us are convinced that the ability to enter hypnosis is the skill of the subject, not the hypnotist."

Children appear especially amenable. In the January *GENERAL HOSPITAL PSYCHIATRY*, Wain and Daniel G. Amen describe the case of a 10-year-old boy brought to an emergency room after being hit by a car. They put the boy in a trance by suggesting he close his eyes and pretend he was at the movies. The boy remained quiet, rhythmically moving his hand from his thigh to his mouth, and the surgeon was able to set his fractured leg. The hand movement? The boy explained

later that he eats popcorn at the movies.

Among adults, the best patients are the motivated ones, says Marlowe — people with drug intolerance or poor lung function that would make chemical anesthesia dangerous, or people who are emotionally upset at the idea of anesthesia.

Techniques differ from hypnotist to hypnotist. Both direct suggestion — ("you'll feel no pain") and indirect suggestion ("you will be surprised to find you feel perfectly comfortable") are used. Some practitioners tell the patients that their hands will become numb.

Unconventional problem, unconventional solution

The Shreveport, La., surgeons were faced with a difficult task. A 40-year-old woman had a large benign growth on the back of her thigh, so large that it interfered with walking. Impeding what would otherwise have been a straightforward operation was the patient's weight — 575 pounds.

Their first plan was to inject a regional anesthetic into or near the spine; but there were no needles long enough to reach the desired area. Giving her a general anesthetic through a gas mask was ruled out because the tumor and her weight prevented her from lying on her back, and they would have been unable to put a tube down her throat.

Years ago the anesthesiologist on the case, Norman H. Blass, had read of a cesarean section done on a hypnotized patient. Lacking any alternatives, the surgical team opted to give it a try.

During four one-hour sessions (longer than what frequent hypnosis practitioners use), psychologists put her in a trance. During one, the team tested her pain threshold by pinching the base of her thumb, which she failed to feel. In another session the anesthesiologist described what would go on in

the operation.

When that numbness is achieved, the patient is instructed to "transfer" it to the desired area. Sometimes patients are told to imagine themselves elsewhere. Unlike chemical anesthesia, hypnosis apparently has no side effects. "We have been unable to find a single report of untoward reactions to hypnosis in surgical procedures," reported Kenneth R. Tucker of the University of Washington in Seattle and Frank R. Virnelli of Boston University in the July 1985 *JOURNAL OF PLASTIC AND RECONSTRUCTIVE SURGERY*.

Hypnosis users say the instance of a patient coming out of a trance in the midst of surgery is extremely rare. In the event of a problem, the procedure is stopped while the hypnotist puts the patient back into a trance, or more conventional anesthesia is initiated.

Despite the lack of problems, most hypnosis advocates say it is not likely to become a primary anesthetic in general surgery. Even some of its users are nervous about it. "There are no guarantees, and we like guarantees," says anesthesiologist Norman H. Blass of Louisiana State University in Shreveport.

Says Orne, "We already have excellent, effective techniques." He believes, however, that there is room for expanding the role of hypnosis as a preanesthetic. "Medicine has a habit of the trickle-down phenomenon," he says. "That's just beginning to happen here."

While hypnosis is not for everybody, says Marlowe, "it's a good technique and should be part of the armamentarium." □

the operation.

During the two-hour operation, says Blass, "she did beautifully." The only difficult moment came when surgeon Don M. Morris was unable to lift the 55-pound tumor off the back of the patient's thigh. He resorted to driving a metal spike through the mass, and raising and removing it with a small hydraulic lift.

The patient became disturbed during that process and her blood pressure spiked. She waved her hand to signal distress and was injected with a narcotic. The problem, the team concluded, arose because the unexpected step had not been described to the patient during the rehearsal.

But Blass says he's unlikely to resort very often to hypnotism. "It's too involved, too difficult," he says. Most patients can and should be given standard anesthesia, the surgical team reported in a description of the operation in the June 14, 1985 *JOURNAL OF THE AMERICAN MEDICAL ASSOCIATION*. Nonetheless, they said, for people like their obese patient who couldn't get conventional anesthesia, hypnosis is a viable alternative.

— J. Silberner