



PHOTO-ILLUSTRATION FOR TIME BY C.J. BURTON

# Mind over Medicine

Hypnosis as an alternative to sedation is making a comeback in the operating room. Here's how it works

By **SORA SONG**

**S**HELLEY THOMAS, 53, WAS WHEELED into an anteroom at London's Middlesex Hospital in preparation for pelvic surgery. A patient going into that operation is usually given a mix of painkilling narcotics and nerve-quelling tranquilizers. But not Thomas. Instead she rested on a gurney, alert and calm, taking deep breaths at her hypnotherapist's instruction. Thomas counted aloud, "One hundred, deep sleep; 99, deeper sleep; 98..."

"By the time I got to 95, the words and numbers had all gone," says Thomas. "It's quite peculiar. They all go."

Minutes later, thoroughly hypnotized, Thomas was rolled into the operating room. There she underwent a 30-min. procedure with no anesthetics and no discernible pain. Her hypnotherapist stayed by her side throughout, monitoring her trance state and refocusing her mind when it drifted.

Thomas' story is not as extraordinary as you might think. Since the early 1990s, thousands of patients have opted for hypnosis—either as a substitute for or (more typically) as a complement to anesthesia—in a wide variety of surgical procedures, from repairing hernias to removing tumors. At the University Hospital of Liège in Belgium, a team of doctors led by Dr. Marie-Elisabeth Faymonville has logged more than 5,100 surgeries by hypnosedeation, a technique Faymonville developed that replaces gener-

al anesthesia with hypnosis, local anesthesia and a mild sedative. "Patients tell us that it is a very special experience," says Faymonville. "We now have people coming from all over the world."

Hypnosis was first used as a surgical anesthetic in India in 1845 but was quickly abandoned with the introduction of ether the following year. The practice languished for decades, becoming, at least in the public eye, little more than a parlor trick. In 1958 it was sanctioned by the American Medical Association for use in medicine and dentistry. Since then, doctors have hypnotized patients to help ease such ills as migraines, depression, anxiety and chronic cancer pain.

But it is in Europe that surgical applications of hypnosis have flourished. The new interest stems in part from studies showing that hypnosedeated patients suffer fewer side effects than fully sedated ones do. According to Faymonville, hypnotized patients can get by on less than 1% of the standard medications required for general anesthesia, thus avoiding such after-effects as nausea, fatigue, lack of coordination and cognitive impairment. In a 1999 study of thyroid patients, Faymonville found that the typical hypnosedeated patient returned to work 15 days after surgery, compared with 28 days for a fully anesthetized patient.

Meanwhile, studies using advanced

scanning technology have shed new light on how hypnosis works to block pain. In a report published two years ago in the journal *Regional Anesthesia and Pain Medicine*, Dr. Sebastian Schulz-Stübner of the University of Iowa reported using heat-producing thermodes to measure the pain thresholds of 12 healthy volunteers ("painful" stimuli earning a rating of 8 or higher on a 10-point scale). When the participants were hypnotized and re-exposed to the thermodes, all 12 reported feeling significantly reduced pain (with ratings of 3 or lower) or no pain at all.

The differences in the subjects' brain scans were equally striking. The typical pain signal follows a well-worn path from the brain stem through the midbrain and into the cortex, where conscious feelings of pain arise. In Schulz-Stübner's study, the hypnotized group showed subcortical brain activity similar to that of nonhypnotized volunteers, but the primary sensory cortex stayed quiet. The "ouch" message wasn't making it past the midbrain and into consciousness.

The new findings have fostered interest in the U.S., where doctors are using hypnosis for procedures in which sedation is inappropriate or for patients who are allergic to anesthetics. Dr. David Spiegel, associate chair of the department of psychiatry and behavioral sciences at Stanford University, hypnotizes Parkinson's sufferers during the implantation of deep-brain electrodes—a process that requires tremulous patients to remain conscious and calm. He has also coaxed children into imagining that a balloon tied to their wrist will fly them to their

favorite places, a hypnotic technique that has lessened anxiety in pediatric patients undergoing bladder catheterizations. In Iowa, Schulz-Stübner hypnotizes patients to reduce pain and anxiety while they receive pre-surgery nerve blocks, such as epidurals. He finds that the calming effects of hypnosis

often last through the entire operation.

Yet even the most enthusiastic proponents of hypnosedeation don't suggest that it replace anesthesia entirely. For one thing, not everybody can be hypnotized. Some 60% of patients are hypnotizable to some degree, Spiegel says; an additional 15%, highly so. The rest seem to be unresponsive. Moreover, many patients are fully sedated before surgery not because the surgeon requires it but because they choose to be. "People don't want to feel or hear anything. They want to be out," says Schulz-Stübner. "That's what you hear most of the time."

**Hypnotized patients recover more quickly, with less pain and with fewer side effects**