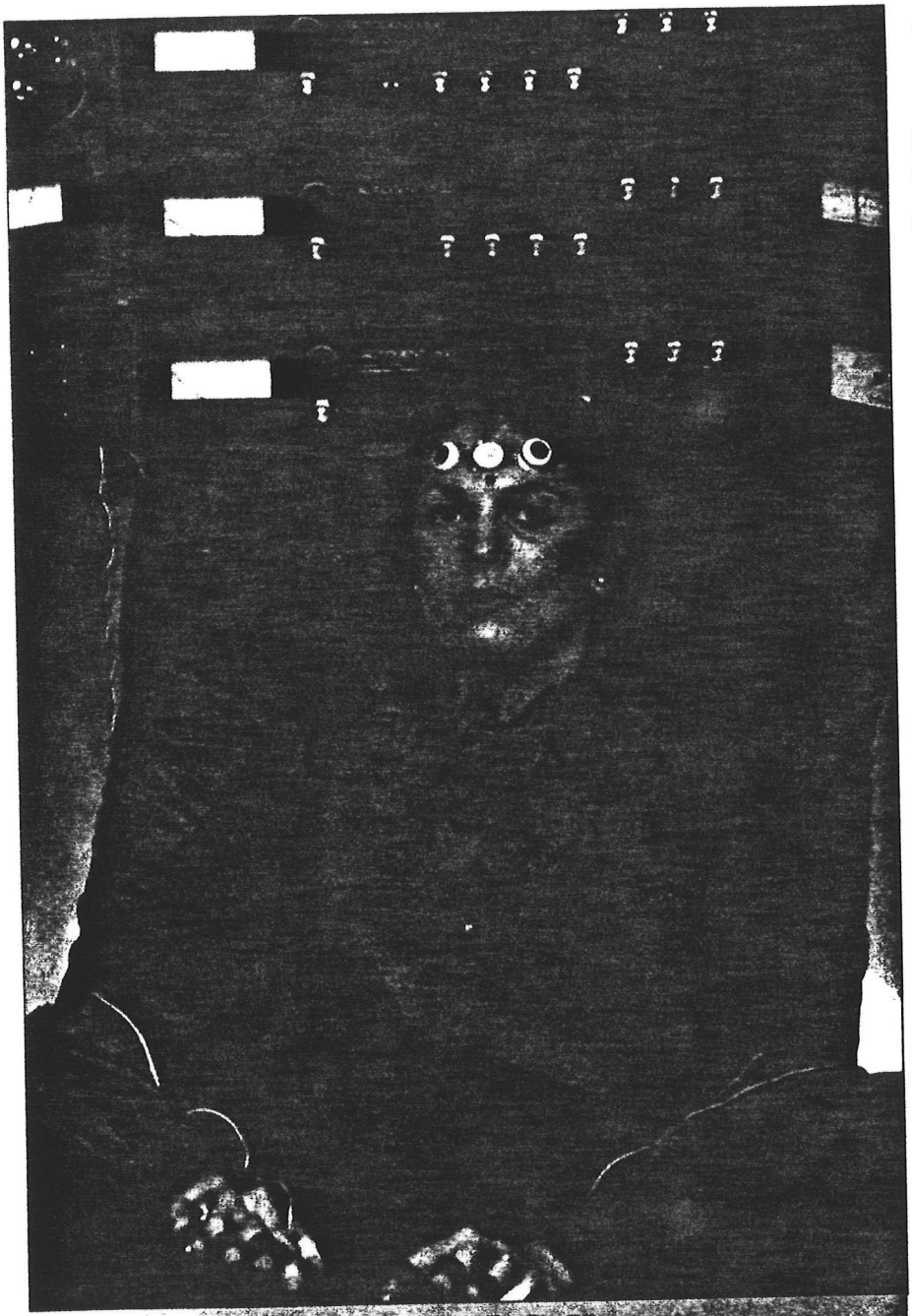
Conquering Pain

New Treatments, New Hope · By Melinda Blau



BIOFEEDBACK

Flashing lights and flickering dials signal subtle muscle, skin, and vascular changes, allowing the patient to master the mechanisms of her pain.

THROBBING, STABBING, PULsating, aching, burning, torturous, agonizing, racking, excruciating, insufferable, grueling, intolerable. The English language has pain down to a science. Unfortunately, doctors don't.

In the war against disease, the medical profession has an impressive armory—computerized scanners and electrical implants and space-age replacement parts, laser surgery and other exotic techniques, not to mention a pharmacopoeia of wonder drugs. But for all these advances, medical miracle workers have given scant attention to the most common complaint and the most frequent cause of disability and suffering: pain.

The encouraging word is that medicine is finally beginning to take pain seriously. There are now several centers in New York where practitioners are concerned specifically with the relief of pain—no matter what the disease or cause behind it. "Where to Take Your Aches and Pains" (page 33) describes these special pain facilities in detail.

The not-so-encouraging word is that while pain is the focus of increasing attention, the science of treating it is still in its infancy. Many doctors are unable or unwilling to deal with pain as such—after all, they were trained to cure disease, not symptoms—and many are unaware of the city's various pain facilities. In fact, one New York woman was sent to Seattle by her doctors because, they told her, there was no place in the city capable of dealing with her pain. Even when patients try to find help on their own, they frequently end up in the wrong hands. A person doesn't need a license to hang out a shingle that says PAIN EXPERT— and there's a lot of money to be made from suffering.

To be sure, researching the pain circuit—which ranges from private practitioners to "pain clinics" (where teams of specialists try everything from aspirin to acupuncture), to psychiatrists who use hypnotism and biofeedback, to chiropractors, physical therapists, and exercise experts—is a lesson in confusion. Undoubtedly, it's even more frustrating if you're actually in pain. Trying to wade through the jargon and to sort out the different and often conflicting philosophies and approaches is enough

Photographed by Ken Regan/Camera 5. Illustrated by Elaine Grove.

to put even the strongest stomach into spasm.

In fact, that's often what happens. Consider "David," who suffers from lower-back pain, which, with headaches, is the most common complaint:

David goes to an internist, who prescribes tranquilizers, ice packs, and bed rest. The pain doesn't go away. A second internist prescribes a different drug, says moist heat is better, and suggests exercise. Confused and still in pain—even though neither doctor knows why—David goes to specialists. An orthopedic surgeon suggests traction; if that fails, disk surgery. An anesthesiologist offers to numb the pain with a nerve block. And when a psychiatrist hears that David wishes his boss would get off his back and that he thinks of himself as someone who carries the world on his shoulders, he deduces that David's pain is a symptom of emotional disturbance and suggests therapy.

David's life starts to fall apart. He constantly calls in sick; he stops making love to his wife; he's irrational and antisocial, alienating his family and friends. He begins to gain weight and drink more than he used to, and becomes increasingly dependent on painkillers. He is morbidly depressed. And his back hurts more than ever.

THERE ARE 50 MILLION AMERICANS like David, victims of chronic, intractable pain, many of whom are depressed, drug-dependent, and desperate. Unlike acute pain, usually an early warning of disease, treatable, and short-lived, chronic pain is not just a symptom—it becomes the disease. It may be there as the result of pain that lingers long after the original cause has disappeared, or of painful diseases, such as cancer and arthritis—or have no apparent cause.

Dr. John Bonica, professor of anesthesiology at the University of Washington and founder of the Multidisciplinary Pain Center, in Seattle, spearheaded the movement to recognize pain as an entity unto itself. Bonica and other pain specialists are alarmed by an epidemic of pain throughout the industrialized world. Americans, and especially stress-laden New Yorkers, contribute substantially to the figures.

"Nearly one-third of the population has persistent or recurrent chronic pain—and of those, one-half to two-thirds are either partially or totally disabled for periods of days, weeks, or months, and sometimes permanently," reports Bonica. He estimates that pain results in the loss of some 700 million workdays a year and costs the public close to $60 billion a year—in litigation, in compensation, and, mostly, in search for relief.

The staggering numbers pale to insignificance when the "cost" is measured in terms of human suffering. It's incalculable—and, worse, often unnecessary.

Take the case of "Janet," a woman in her early twenties with a vague pain in her face. Her dentist advised root-canal work. The pain persisted. She was referred to an oral surgeon to have the tooth extracted. The pain got worse. An ear-nose-and-throat man operated next, scraping out the sinus cavity in the area above the tooth. After surgery, a massive infection developed. Janet had an allergic reaction to the post-operative antibiotics, which caused phlebitis—extremely dangerous in the face because of its proximity to the brain. Three years, thousands of dollars, and five operations later — done by different specialists in several of New York's more prestigious institutions—Janet was addicted to Demerol and plagued by recurrent epileptic-like seizures. She is still in pain. The doctors at the pain clinic where she gets weekly nerve blocks that allow her some relief speculate that the problem wasn't in her tooth after all; it was in her jaw.

Janet's story is a dramatic, although not uncommon, illustration of why chronic-pain patients have, as one physician put it, "slipped through the cracks." Doctors practice in the isolation of their private offices, treating patients with the tools of their particular specialties. Compounding what John Bonica calls this "tubular vision" in the medical profession, the specialists don't compare notes or join forces; often they don't even realize whom else the patient has seen or what's already been done. Every expert has his or her personal biases and therapeutic preferences, and sometimes they become impatient with pain—especially when there's no observable pathological reason for a person's complaint.

Doctors are used to treating "parts" or "systems." But pain is a complex phenomenon that must be viewed in terms of the whole person, not just the site of the pain. Who you are—your age, sex, life-style, economic status, cultural background, and, most important, emo-

Dr. Herbert Spiegel and patient.

HYPNOSIS

The strain of pain is mainly in the brain. In a trance state the mind is highly focused and can change painful sensations into a tingling numbness.

tional and psychological makeup—is just as important as where you hurt.

WHAT IS PAIN?

DOCTORS TRY TO QUANTIFY pain. After all, only if it can be measured can it become a science. Patients may be asked to rate their pain or to respond to a questionnaire, such as the one developed at McGill University, which lists various adjectives—"mild," "discomforting," "distressing," "horrible." But what really counts is how the person deals with pain.

Dr. Edith Kepes, who directs the Pain Treatment Center, at Montefiore Hospital, says that she and her staff pay close attention to certain "objective elements"—the patients' daily activities, how many hours they sleep, how much time they spend in bed. The longer a person evidences "pain behavior," the harder it is to change it. "We've found in reviewing our results of treatment over the years that patients who have had pain more than five years have lower rates of success," she says.

According to David Richlin and Leonard Brand, the physicians who co-direct the Anesthesiology Pain Treatment Service, at Columbia-Presbyterian, there are several characteristics that make people susceptible to the chronic-pain syndrome: low motivation, poor self-image, lack of pride in accomplishments, dependency problems. Most significant, there's usually a "secondary gain"—the person gets a lot of attention and is able to avoid responsibility. In other words, it pays off to be sick—literally, if workmen's compensation or disability benefits are involved.

New York City internist Herbert Berger observes, "For more than half of all patients in chronic pain there's no organic disease." Other clinicians not only support Dr. Berger's estimate but think it is "conservative."

The emotional factor is clearly defined by the International Association for the Study of Pain: "Pain is always subjective.... If [patients] regard their experience as pain, and if they report it in the same way as pain caused by tissue damage, it should be accepted as pain."

Because medical science is finally beginning to accept the mind-body connection, many doctors are taking a second look at pain patients who've been harshly labeled "hypochondriacs" and told, "It's in your mind." In all fairness, who's to say that pain "in the mind" is not pain? The truth is, we don't even have a thorough understanding of the *physiological* nature of pain.

We do know that there are countless filament-like nerve endings that are especially sensitive to potentially painful stimuli and respond by sending electrical impulses to the brain. How you deal with these signals depends on who you are emotionally and how the neurological connections and chemical reactions in your body mediate these messages.

The oldest, most widely held model, the "gate theory," suggests that the spine controls the flow of nerve messages to the brain. The "gate" is composed of special nerve cells in the dorsal horn, which is the row of entry points all along the spine where messages from the body are gathered before being sent via the spinal cord to the brain. When you're in pain, the gate is open, sending the alarm. Classically, treatments based on the gate theory aim simultaneously to load the spinal cord with other signals by means of electrical stimulation or vibration, so there can be no room for the pain messages to get through. It's like making a six-lane highway into three. Perhaps that's why you tend to rub whatever hurts you.

GOOD AND BAD DRUGS

MORE RECENTLY, researchers have discovered that chemicals produced in the body also play an important role. Endorphins—the brain's natural opiates—may hold the key to pain control. For example, it is believed that acupuncture relieves pain by stimulating the brain to produce endorphins.

Drug companies are working feverishly to develop new analgesic drugs—painkilling "agonists" that imitate the body's natural opiates, as well as "antagonists," substances that bind to receptor molecules in the nervous system, where they act as "roadblocks" to pain messages.

In the search for better analgesics—the mainstay of the medical profession in the treatment of pain—researchers have also looked at prostaglandins, chemicals in the body that, among other things, control the activity of the involuntary (smooth) muscles, as in blood vessels and the intestines. We know that some people produce excessive amounts of prostaglandins—for instance, women who suffer from dysmenorrhea (painful and debilitating menstrual cycles), which affects one woman in ten. New analgesics on the market, such as Zomax (zomepirac), are extremely effective because they inhibit the release of prostaglandins. Researchers are also working on drugs that will affect *specific* prostaglandins, which means you could take a pill that would act exclusively in places where it's needed in the body.

Interestingly, some of the "new" drugs for pain have been around for a while—for other purposes. When doctors began prescribing Inderal for angina and high blood pressure, patients reported that their migraines went away. They found that Motrin and Indocin, anti-inflammatory agents used to treat arthritis, eased pain as well, even when there was no inflammation. Periactin, an antihistamine, and Dilantin, used with epilepsy patients, also work as analgesics.

"Serendipitous findings like these are often the most exciting in medicine," says Dr. Ronald Dougherty, comparing them to Fleming's discovery of penicillin. Eight years ago, Dougherty, an M.D. in Syracuse specializing in alcohol and drug rehabilitation, found that many of his patients were also suffering from chronic pain. "Fifty percent of the people in chronic pain take one to five drugs, 40 percent abuse drugs, and 25 percent are addicted to their medications, meaning that if they stop they'll experience all the classic withdrawal symptoms."

Dougherty's experience is mirrored in pain clinics throughout the country. While there's an important role for medication in the treatment of pain, drug abuse is another story. Patients often visit five or six doctors; no longer in search of a cure, they want prescriptions. Valium, Percodan, and codeine seem to be the favorites. It's not that patients enjoy taking the drugs—on the contrary, several surveys have shown that most patients, even those with cancer, worry about taking so many medications—but they desperately want relief.

At pain clinics, after a patient is slowly weaned from narcotics, non-addicting analgesics are prescribed. Sometimes antidepressants, like Elavil, are also needed to break the "vicious pain cycle"—pain leads to depression, which in turn leads to more pain and more depression. The experts agree that even aspirin should never be prescribed P.R.N., "as needed." It should be taken on a regular basis, prophylactically, before the pain starts. This limits the patient's anxiety about medication and maximizes the effect of the drug.

With cancer patients, the picture changes in one respect: For those in moderate to severe pain, narcotics, such as morphine, are often prescribed. "It's unfair to say it doesn't matter if a terminal patient becomes addicted," says Kathleen Foley, director of Memorial Sloan-Kettering Cancer Center's Pain Clinic. "In fact, they rarely do." Several physicians concurred with Dr. Foley and also pointed out that there's a difference between dependence and addiction. A

patient may become dependent on a drug to relieve pain, but only when the acquisition of the drug becomes the person's major focus is he or she considered "addicted."

In the past there has been a great deal of controversy over the legalization of heroin for cancer patients. Supporters, such as the National Committee on the Treatment of Intractable Pain, believe that it's more effective than morphine, since it can be given in smaller doses and is more soluble. Its euphoric effect is also beneficial in raising patients' spirits. To them, another important question is, why shouldn't cancer patients be allowed to have *any* analgesic they want that might relieve their pain? However, because of the profound social and economic implications of legalizing heroin, other alternatives have been sought. Dr. Foley makes an important point: "The fact is, patients aren't getting adequate relief, because physicians don't know how to use narcotic analgesic drugs effectively." Hydromorphone, like heroin, is more soluble than morphine and is effective in smaller volume.

Because people metabolize medications differently, the correct dosage of a given drug for a particular person is not automatically apparent. Most drugs require a trial period. Unknowing doctors can also cause unnecessary pain if they're not aware of the effects of combining various drugs, or of switching from one to another.

Given properly and judiciously, analgesics can relieve pain, and antidepressants can lift patients' moods, enabling them to function again. But drug therapy should never be The Answer.

THE KNIFE, AND OTHER PAIN BLOCKS

THERE ARE SURGICAL OPERATIONS in which particular nerve fibers in the spinal cord or other parts of the body are cut, or where electrical implants are inserted and then controlled by transmitters outside the body to compete with pain messages to the brain. But surgery should be the last resort. Because so little is known about the mechanisms that cause pain, patients who've agreed to these measures may still find themselves in pain, and with other complications. Tragically, the person for whom pain surgery is recommended has probably already had too many, or unnecessary, operations.

Nerve blocks are often used to conquer severe, intractable pain. Either a local anesthetic or another type of chemical—a steroid or alcohol—is injected into the area suspected of controlling the particular pain syndrome. The result is total numbness and, assuming the physician gets the right spot, no pain. Depending on what's used and where it's done, the effect can last hours or days—or forever. Although these procedures are widely used, especially in pain clinics, after people have already tried most other pain-relieving approaches, there can be complications from the drugs or damage to muscle tissue.

"Trigger points"—tender areas in muscles that explode with pain when touched—are also treated with injections of local anesthetics or cortisone, or by "needling," rotating an acupuncture needle in the area. They're believed to be muscle tears, or perhaps accumulations of nerve cells. Although no one is certain, it is known that trigger-point therapy, like nerve blocks, can be helpful in a number of muscle and nerve disorders where more conservative pain relief has failed.

CHIROPRACTIC

Adjusting a misaligned spine eases pressure on nerve endings and relieves painful muscle spasms.

ELECTRICAL RELIEF

A MORE RECENT DEvelopment than the electrical implant, which is used only very infrequently nowadays, is a portable electrical device worn outside the body. Its electrodes are placed either at the site of the pain, on trigger points, or along related acupuncture meridians. The battery-operated gadget (one company modeled its version on a tampon carrier) provides what is called "transcutaneous electric nerve stimulation," or TENS. In other words, it sends electrical impulses to the area. TENS, a kind of electronic aspirin, must be prescribed by a doctor. It's widely used in rehabilitative medicine, by physical therapists, and in

pain clinics, often with remarkable results. Sometimes the relief is short-lived. As with drugs, the body learns to tolerate the effect. You can rent a machine for a trial period ($75 to $125 a month). The purchase price is between $550 and $650, and many insurance companies will reimburse the buyer. No one is absolutely sure why TENS works when it does—both the gate theory and endorphin research have been used to explain it—but it has never been shown to have harmful effects.

Physical therapists, who've been in the business of relieving pain since long before it became the "in" thing to treat, use TENS and a variety of other electronic techniques. Joseph Kahn, a physiotherapist in Hicksville who teaches electrotherapy at the State University of New York at Stony Brook, says, "With the exception of TENS, which entered the field in the early seventies, none of the modalities are new. Success, it seems, is mainly a matter of technique rather than theory." Among the other methods are: iontophoresis, which involves introducing analgesics and other chemicals through the skin using electrical current; ultrasound, which is high-frequency sound used to reduce spasm;

and diathermy, which is high-frequency radio waves that produce heat in the muscles, soothing them without heating the body surface.

BED REST OR EXERCISE?

EXERCISE—EITHER DONE "PASsively," by having another person, such as a physical therapist, move your limbs for you, or done actively on your own—is widely recommended by pain clinics, not only for its effect on the body but for the psychological benefit as well. Joining a health club or enrolling in an exercise class gets the sufferer out of the house and, just as important, mingling with people. In some cases, like the Y's "Back Care and Posture" class, misery has company. Movement also does a lot of bodily good. According to Sandra Lotz Fisher, director of fitness and health at the 53rd Street Y.W.C.A., "80 percent of the people who have back problems can be cured through exercise—the rest can be eased to some degree."

Dr. Hans Kraus, a specialist in physical medicine and rehabilitation who treated John F. Kennedy for his lower-back pain, is a strong advocate of exercise. In his most recent book, *Sports Injuries,* Dr. Kraus recommends "MECE not RICE." RICE is his acronym for what most physicians recommend for acute strains and sprains: rest, ice, compression, and elevation. MECE, on the contrary, stands for movement, ethyl chloride (a cooling spray that acts like a local anesthetic), and elevation. Says Dr. Kraus, "Rest doesn't promote healing—movement does."

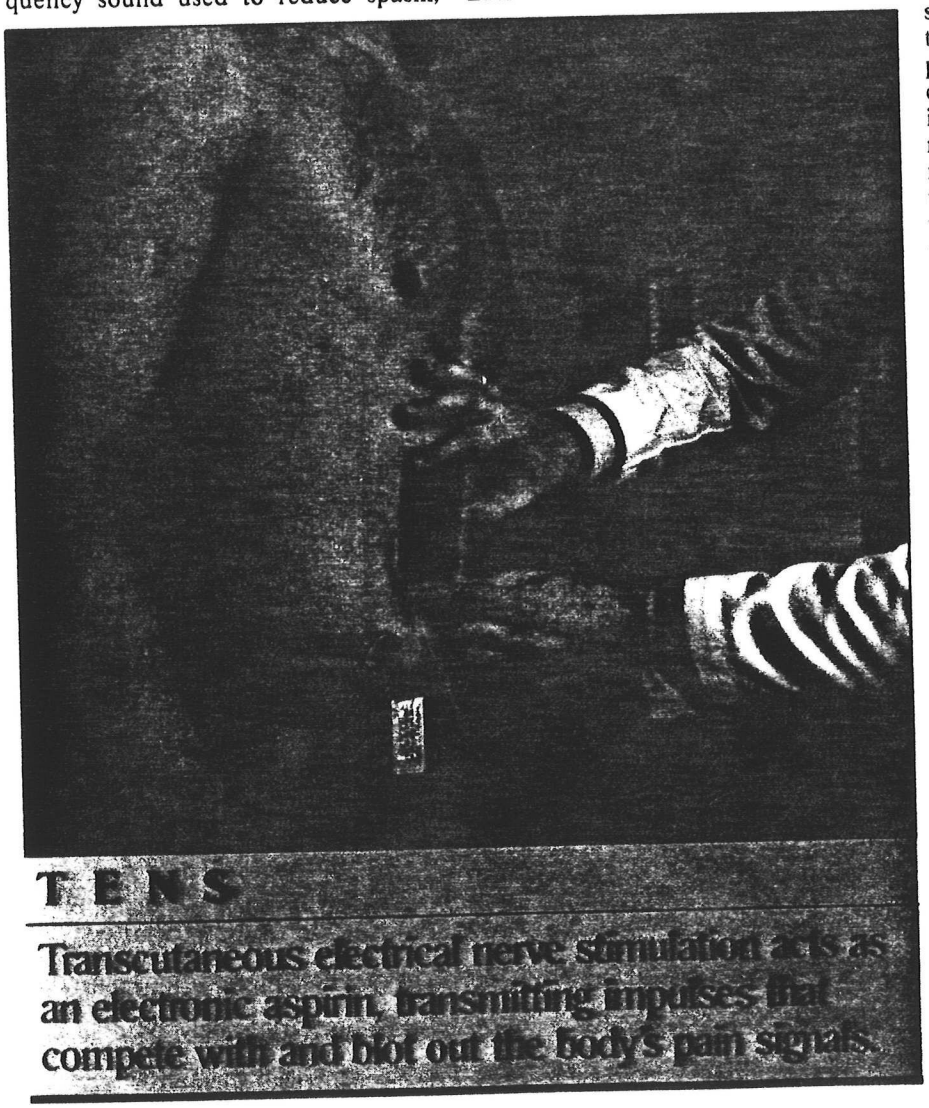
THE CHIROPRACTOR

MANY CHIROPRACTORS RElieve muscle tension using large electronic stimulators that work like TENS. Some also use diathermy and ultrasound. But the mainstay of the chiropractic technique is spinal manipulation—"adjustments" that realign the spine, thereby relieving pressure on the nerves. At a good chiropractor, an initial workup usually includes a hands-on examination, an X-ray, and an evaluation of the person's nutritional picture, drug and alcohol intake, work habits, and levels of stress. "If we find that the problem is caused by an underlying pathology, we'll refer the patient to an M.D. for treatment," emphasizes Dr. Mystical Del Giorno, a Manhattan chiropractor.

Forty million Americans go to chiropractors—it's the second-largest healing art—but many doctors are quick to criticize, saying that not all diseases are related to misalignments of the spine or lack of normal nerve function. Dr. Del Giorno is amused by M.D.'s who "don't believe in" chiropractors: "What are we—tooth fairies? No one asked them to *believe* in us—we exist!" She also points to the fact that if malpractice-insurance rates are any reflection of the danger of a particular method of healing, "ours is minimal compared to theirs."

Not all physicians bristle at the thought of their patients' visiting chiropractors. Dr. Thomas Kantor, a leading rheumatologist affiliated with N.Y.U.'s Comprehensive Pain Center, sees many arthritic patients who've been to chiropractors. "Whether or not the chiropractic approach is a sound one, there are a lot of very bright chiropractors." He advises patients to try six visits. "If you're not getting better, or if you're worse, then it's hurting you."

Dr. Del Giorno says it usually takes at least three months to realign a spine,



TENS

Transcutaneous electrical nerve stimulation acts as an electronic aspirin, transmitting impulses that compete with and blot out the body's pain signals.

longer in more difficult cases, but patients often feel better after one or two visits. "All steps should be taken before having nerve blocks or undergoing surgery. The sad part is when people don't include chiropractic treatment as one of those steps."

ACUPUNCTURE

ACUPUNCTURE AND ITS NON-invasive counterpart, acupressure, enjoy somewhat more acceptance than chiropractic among medical practitioners, but many doctors still respond to the claim that "it's been around for 6,000 years" with the comment "So have witch doctors." Still, many pain patients, even within the walls of our most hallowed medical institutions, are getting relief through this ancient healing art. The needles are placed in appropriate spots along the meridians, or energy pathways, of the body. The philosophy of the acupuncturist is to open up blockages of energy, restoring balance to the entire system, which in turn cures the disease and alleviates the pain. Acupuncture doesn't help everyone, but it has been used with success in almost every type of pain syndrome, from headaches and back spasms to the pain of cancer. What frightens some people away is the fact that they don't understand it—which might be a good reason to avoid many traditional modes of healing as well.

HYPNOSIS

HYPNOSIS, A FORM OF INtensely focused concentration, has proved to be a valuable tool in pain control, allowing the mind to create a kind of inner analgesia. Dr. Herbert Spiegel, a New York psychiatrist and one of the country's leading experts in medical hypnosis, reports the case of a young cancer patient: "He's able to use the trance state to deal with the effects of chemotherapy. Because he's a rock fan, he decided to add background 'music' to the sensation of numbness that he uses to block out the feeling of pain." Spiegel explains that the boy is highly hypnotizable.

"Hypnosis is more of a science now that we've introduced the concept of first measuring a person's trance capacity and then tailoring treatment strategy accordingly." Dr. Spiegel gives patients the five-minute Hypnotic-Induction Profile, which measures hypnotizability on a scale of one to sixteen. One aspect of the test is the extent to which you can keep looking up while closing your eyes. Then you're "scored" on how well you respond to suggestion in the trance state and on your answers to questions about the experience. People on the high end of the scale—coincidentally, people who are also good acupuncture subjects—are able to put themselves into a trance state easily and can change feelings of pain into "a tingling numbness."

Dr. Spiegel laments our dependence on gadgets and chemicals: "One of the great therapeutic instruments is the mind. Of all the practical applications of hypnosis, nowhere is it more important than to alter our perceptions and to negotiate pain in the masterly way."

ACUPUNCTURE

Delicate, strategically placed needles bring relief by opening up blocked energy channels, say the Chinese, who've been doing it for generations.

BIOFEEDBACK

BIOFEEDBACK ALSO RELIES ON the power of the mind, and in fact is recommended by Spiegel for patients on the low end of the scale. Kenneth Greenspan, the psychiatrist who runs the Center for Stress and Pain Related Disorders, affiliated with Columbia-Presbyterian, is a staunch supporter of biofeedback and a leading expert on stress. He uses the word "mastery" to describe the goal of treatment. By watching flashing lights or listening to bleeps that vary in speed and pitch as the machine "reports" subtle changes in body temperature, pulse, and other supposedly involuntary reactions, people can actually see and then learn to control what their environment does to their bodies. Dr. Greenspan has taught migraine sufferers how to relax tense forehead muscles and to raise the temperature of their hands—both of which have proved so effective in warding off oncoming attacks that many insurance companies will now reimburse migraine patients for biofeedback training. Also, in a study of cardiovascular cases done by Dr. Greenspan with New York Hospital's Hypertension Center, 80 percent of the patients who had biofeedback training were able to go off medication.

The significance of biofeedback is not the machine; it's the message: Put yourself in control. Doctor dependency has become a major addiction of our time—and the prevalence of pain is proof enough that we've all been on the wrong track. In the best of all possible worlds, instead of writing prescriptions and cutting out pieces of bodies, doctors would be like coaches, checking out the other team—disease—teaching patients strategies to beat the opposition, and then sending them out to win. ■

Where to Take Your Aches and Pains

LOOK AROUND: ONE OUT OF EVery three people is in pain. Since that's the worst time to make a decision about where to get help, here is a list of excellent pain-treatment centers. Remember, yesterday's stress becomes today's psychic pain and tomorrow's suffering. The best time to act is before the pain becomes chronic.

COMPREHENSIVE CENTERS

AFFILIATED WITH LARGE HOSPItals, these multidisciplinary centers are staffed by teams of specialists and have facilities, either within the institution or by referral, to treat most chronic-pain syndromes. They tend to get the really tough cases—people who've already suffered through unsuccessful treatments and who've had their pain for years.

Comprehensive Pain Center, N.Y.U. Medical Center. Established in 1958 as the Pain Research Group, this facility, according to its co-director psychologist B. Berthold Wolff, is the only truly comprehensive center in New York. Patients may be sent to one or more of the seventeen specialists who participate. "We use everything from behavior intervention to surgery," says Wolff. That includes what Wolff calls "more generalized tools"—biofeedback, acupuncture, and hypnotherapy. The initial workup includes pain diagnosis using a special physiological-pain test that measures threshold tolerance and endurance. The average patient has had 4.3 operations and has already seen 30 to 40 doctors, Wolff notes. One girl, aged nineteen, had had eleven back operations by the time this team saw and, finally, helped her.

530 First Avenue, at 32nd Street (340-6622); hours by appointment only. Initial evaluation and workup, approximately $800, depending on the case. By physician, dentist, or psychologist referral only.

Pain Treatment Center, Montefiore Hospital and Medical Center. Dr. Edith Kepes, an anesthesiologist, and her co-director, Dr. Norman Marcus, a psychiatrist, are the first to see patients, but they are also evaluated by other specialists in the complex. The treatment program, tailored to each case, includes drug therapy, trigger-point injections, nerve blocks, TENS, biofeedback, relaxation techniques, weight control, and psychological counseling. Dr. Kepes reported the case of a woman in her late forties who after breast surgery experienced terrible pain in her incision. The first step was helping the woman to accept that she was in fact deeply depressed and anxious. "Pain is respectable," Dr. Kepes points out. "Anxiety is not." The center put the woman on antidepressants, which helped her sleep and raised her spirits, and advised her to go swimming. Within a few weeks, she had gained weight and returned to work. Dr. Kepes emphasizes, "Chronic pain is where the suffering is out of proportion because of depression."

111 East 210th Street, the Bronx (920-4440); Tuesdays and Fridays 9 a.m. to noon. Initial workup (if you see both doctors), $200. By physician referral only.

Anesthesiology-Pain Treatment Service, Columbia-Presbyterian Medical Center. Under the direction of David Richlin and Leonard Brand, a wide variety of pain syndromes are handled here. Treatment may include withdrawal from drugs, followed by a program of non-narcotic medication and antidepressants; exercise, physical conditioning, and weight reduction; and non-surgical pain-relieving techniques, such as nerve blocks, TENS, and hypnosis. Strong emphasis is placed on psychological assessment and support. "We not only have to relieve pain," Richlin points out, "we have to change pain behavior." One woman who'd had burning pain in her foot for five years following an auto accident was helped by lumbar sympathetic-nerve blocks, and a sympathetic ear as well. The doctors "made her stop feeling sorry for herself." Today she's walking, and her mood is better.

161 Fort Washington Avenue (694-7114); hours by appointment. Initial workup, under $200. By physician referral only.

Pain Therapy Center, Maimonides Medical Center. This fifteen-year-old facility, under the direction of anesthesiologist Philip Sechzer, will see "anyone with chronic pain from the top of the head to the bottom of the feet." Migraine is the one complaint that is referred elsewhere. Sechzer confers on the initial evaluation; other specialists are brought in if necessary. Therapy includes nerve blocks, acupuncture, biofeedback, hypnosis, physical therapy, TENS, psychiatric and psychological help, and

Illustrated by Elaine Grove.

neurosurgery. Acupuncture has been quite successful here, especially with pain associated with inflammatory diseases, like arthritis.

4802 Tenth Avenue, Brooklyn (270-7182); hours by appointment; clinic hours Mondays 1:30 to 3 p.m. Initial visit, $75 to $150; clinic patients pay according to income.

SPECIALIZED CENTERS

THESE FACILITIES ARE OF TWO types: those that are multidisciplinary but focus on specific types and sites of pain, such as cancer and headache, and those where most of the treatment reflects a particular medical specialty.

Pain Clinic, Memorial Sloan-Kettering Cancer Center. Clinic director Dr. Kathleen Foley explains that the pain perceived with cancer is similar to other pain; the significant difference is the impact of having the disease. At Sloan-Kettering staff deals with three major categories: pain of the disease itself (78 percent are in this group); pain associated with procedures used to treat cancer, be it surgery, radiation, or chemotherapy (19 percent); and pain that's developed as a result of another disease unrelated to the cancer (3 percent). Sophisticated diagnostic tools help. For example, a man in his fifties who'd had chronic lymphocytic leukemia had recurrent pain after the disease had gone into remission. Naturally, he was frightened, but a CAT scan allayed his fear: The cause was an abscess in a muscle; it was drained and treated with antibiotics. Four years later, he is still in remission. The key, says Foley, is treating the pain early. Drugs, in varying strengths and combinations, are the mainstay of treatment; with some patients, narcotics are used. Nerve blocks, trigger-point injections, hypnotherapy, and TENS are also used if the patient's pain is localized, and when patients request it, they are referred to outside help for acupuncture or biofeedback. "In New York, patients are quite bright and affluent," Dr. Foley points out. "They show a preference for non-drug modalities. The problem is, we don't know the science." But, she adds, "we'll endorse anything that allows patients to feel in control of their pain."

1275 York Avenue, at 68th Street (794-7050); Tuesdays and Thursdays 1:30 to 4 p.m. Initial evaluation, $100. By physician referral only.

Headache Clinic, Mount Sinai Medical Center. Neurologist David R. Coddon uses two basic approaches in his clinic: preventive medicine and the treatment of acute attacks. For the latter, he often prescribes his "sleep treatment"—Compazine, Valium, and Amytal—which puts patients out for three to four hours. Coddon may give his intravenous

"cocktail" to patients with severe headaches six to eight times over a two-week period, which, he says, breaks the frequency and also reduces the severity. Trying to catch headaches *before* they occur is by far the best medicine, says Coddon, who prescribes "triple therapy"—Tofranil, Inderal, and Librium, ten milligrams each, four times a day—for patients who get two or more headaches a week. "The ultimate goal is to get patients to the lowest dosage or off altogether." To that end, he adds biofeedback training, which is sometimes just as effective as drug therapy. Through biofeedback, a 44-year-old woman who had been getting at least one migraine a month and two to three "little headaches" a week learned to control her migraines within three to four months.

1 Gustave Levy Place (650-7691); Mondays and Wednesdays 1 to 4 p.m. Clinic fee on a sliding scale from $12 to $66. Biofeedback done privately only, in Dr. Coddon's office; approximately $500 for six to eight 45-minute sessions.

Headache Unit of Montefiore Medical Center. Dr. Seymour Solomon, current director of the first headache clinic in the world, says the success rate here is 75 to 80 percent. The unit divides treatment into two categories: non-drug and pharmacological. Non-drug therapies focus on making patients aware of what might precipitate a headache: certain foods; alcohol; too much or too little sleep; some medications, like oral contraceptives and nitroglycerin; menstrual periods. Psychological stress, a primary cause of headaches, is helped by biofeedback, relaxation techniques, and counseling. The facility also uses nerve blocks, trigger-point injections, and acupuncture. Drug therapy is used to abort acute headaches and to prevent subsequent ones. Although less commonly, headaches sometimes persist because of misdiagnosis. One 23-year-old had suffered from what at least five doctors, two of whom were neurologists, had called "a variation of migraines." Dr. Solomon's team discovered that it was really a form of hydrocephalus, which was relieved by surgery, shunting fluid from his brain to his stomach.

111 East 210th Street, the Bronx (920-4636); by appointment, Monday through Friday 9 a.m. to 5 p.m. Initial consultation, $90.

David B. Kriser Oro-Facial Pain Center, N.Y.U. Dental Center. According to Dr. William Greenfield, the director, the center deals mainly with three categories of pain syndrome. The most common, TMJ disorders, affect the temporomandibular joint, or jaw, or the muscle tissue that attaches to the jawbones, and can range from vague facial pain to localized arthritis. The second category, so-called atypical facial pain, has no specific trigger points—the pain is irregular and crops up in different places. The third area—trigeminal neuralgia, or tic douloureux—is "the most painful affliction known to mankind," affecting mostly women in mid-life. The center often uses nerve blocks in diagnosis as well as treatment to isolate specific sites of pain, since facial pain tends to radiate to the head, neck, and shoulders. Treatment also includes every other modality from drug therapy and surgery to non-invasive procedures like acupuncture, TENS, biofeedback, hypnosis, and psychological counseling. Greenfield recounted the case of a bright eighteen-year-old college student whose supposed TMJ disorder had caused severe depression. Greenfield's team said it was atypical facial pain, and suggested acupuncture. "Within three visits, he was able to sleep and began to go out again. In a few months he resumed his studies."

421 First Avenue, at 24th Street (481-5023); by appointment, Monday through Friday 9 a.m. to 4 p.m. Initial evaluation, $150.

Facial Pain—TMJ Clinic, Columbia University School of Dental and Oral Surgery. Dr. Joseph Marbach, who directs this long-established clinic, says the staff deals with "any facial-pain syndrome," including atypical facial pain, neuralgia, TMJ disorders, myofascial disorders, atypical headaches, and phantom-tooth pain. In the last category, a phenomenon akin to "phantom limb," he cited the case of a 23-year-old who'd had 38 root canals, 22 apicoectomies (operations to remove diseased bone), and twelve extractions, to relieve pain that had lasted four years.

The sad irony is that phantom pain, caused by damage to peripheral nerves, which send pain signals to the brain even in the absence of the tooth or pulp, only gets worse, according to Marbach, when further operations are performed. He explains that treatment "turns off the light bulb at both ends"—at the site, with nerve blocks, and in the brain, with antidepressants or antipsychotics. The philosophy at this clinic is "take a reversible, conservative approach," which also includes non-narcotic medication, exercise therapy, and trigger-point injections. You won't find biofeedback—Marbach contends that it, along with hypnosis, "has been well documented as a placebo," and that, like surgery and certain dental procedures, "it acts as a barrier between patient and doctor."

630 West 168th Street (694-4185);

Wednesdays 10 a.m. to 4 p.m. Initial consultation, $40.

Head and Neck Pain Clinic, Queens Hospital Center. Affiliated with Long Island Jewish–Hillside Medical Center, this clinic is under the direction of Dr. Seymour Roistacher, a dentist, and has on tap specialists in ear-nose-and-throat problems, psychiatry, physical medicine, and neurology. Roistacher describes treatment as a combination of physical therapy, local nerve blocks, supportive psychological counseling, and, in the acute stages, minimal drug therapy. Many facial pains, he says, are related to tension-relieving habits, such as nail-biting and teeth clenching, which overload muscles, causing painful spasms. One woman came in complaining that she couldn't kiss her boyfriend. Her problem, it turned out, was an indecision about marriage. First, Dr. Roistacher helped her see the connection between her dilemma and the teeth clenching it caused. Then a combination of exercises and relaxation techniques helped relieve the symptoms. Roistacher tells all his patients, "I can treat you locally to get rid of the pain. It's up to you if you're going to get better." Most of the patients here are female and under 35. Roistacher suspects it's the price of feminism—women clench their teeth; men wrench their backs.

82-68 164th Street, Jamaica (990-2881); Thursdays and Fridays 9 a.m. to 4 p.m. Initial consultation, $14 to $40, depending on income.

Center for Stress and Pain Related Disorders, Columbia-Presbyterian Medical Center. Impeccable Establishment credentials notwithstanding, psychiatrist Kenneth Greenspan and his eight-year-old center definitely reflect New Age medicine. The facility uses biofeedback, deep relaxation, nutritional counseling, and exercise therapy, combined with psychological counseling—both individual and group—and, if necessary, antidepressants. Greenspan has worked with migraines and tension headaches, TMJ disorders, musculoskeletal problems, and cardiovascular diseases, among others. Greenspan first asks a patient to work with relaxation tapes and biofeedback, learning to relax and control "involuntary" body functions. He then teaches the patient how to focus on trigger-point areas, guiding him to "breathe into" the area, which Greenspan says opens up "energy blocks"—a term rooted in the Chinese approach to healing. This "focused breathing" technique was observed on two visits while Greenspan treated a 30-year-old jewelry designer who had had lower-back pain for six years and was also suffering from the aftereffects of shingles. Not only was the pain alleviated completely, equally important, Greenspan prescribed exercises to deal with future tension that might reactivate the pain.

Columbia-Presbyterian South, 38–40 East 61st Street (595-3169); weekday hours by appointment. Initial consultation, $300.

Pain Clinic, New York Hospital. Dr. Joseph Artusio, the anesthesiologist who directs this facility, explains that in addition to drug therapy only two modalities are used—nerve blocks and TENS. A number of pain syndromes are treated, among them lower-back pain, neuralgia, myofascial pain, acute herpes zoster (shingles), and post-herpetic neuralgia. Artusio says that the clinic is "a last resort" for at least 30 percent of the patients: "They've 'shopped' throughout the country—even internationally." He adds, "We try not to prolong treatment if there's nothing we can do."

525 East 68th Street (472-5383); Tuesday through Friday 9 a.m. to noon. Initial consultation, about $100.

Pain Clinic, St. Vincent's Hospital. Dr. Melvin Bernstine, the anesthesiologist who runs this clinic, says the most common problems are orthopedic cases, herpes zoster, cancer, and some "where it's hard to find any cause." Twenty-five percent of the time nerve blocks are used. Other treatment includes TENS, trigger-point therapy, and drugs.

36 Seventh Avenue (790-8913); Tuesdays 2 to 5 p.m. Initial consultation, up to $75, depending on income.

Department of Physical Medicine and Rehabilitation, Kingsbrook Jewish Medical Center. As the name implies, this unit, under the direction of Dr. Asa Ruskin, is oriented to physical medicine. Therapies include ultrasound, traction, exercise, hydrotherapy, trigger-point injections, and TENS. Dr. Ruskin treats primarily musculoskeletal problems, trigeminal neuralgia, and causalgia (burning pain). This facility will also refer patients for psychological help and exercise therapy.

585 Schenectady Avenue, Brooklyn (756-9700); by appointment, Monday through Friday 8 a.m. to 3 p.m. Initial workup, $125; clinic patients, depending on income.

ALTERNATIVE APPROACHES

THE FOLLOWING SAMPLING OF private practitioners and programs has proved helpful in a variety of pain problems—and in helping people stay out of pain. In some instances, you may not get your doctor's blessing, but that doesn't mean you won't get help.

Hypnosis. In a trance state your attention is extremely focused, and some say the connection to the unconscious is very strong. Hypnosis can help you deal with pain by allowing you to use your powers of concentration to change the sensation of pain to one of tolerable numbness. Hypnosis can also help you manage harmful habits, like smoking, that make you more susceptible to disease.

Psychiatric departments at teaching hospitals and medical societies can suggest psychiatrists or psychologists trained in medical hypnosis.

Chiropractors. There are approximately 500 in the New York City area. The best way to find one is word of mouth—ask a friend who's been to a chiropractor. They're not all alike: Some only adjust patients' spines, preferring to send them elsewhere if they require nutritional counseling or the services of a physiotherapist.

N.Y. State Chiropractic Association, 45 John Street (571-0910); Monday through Friday 9:30 a.m. to 5:30 p.m.; will give callers three references—from there they're on their own to ask practitioner about the procedures used.

Alexander Technique. Primarily for neuromuscular and musculoskeletal problems, such as lower-back pain, frozen shoulder, tennis elbow, sciatica, and migraines, this technique, pioneered in England, employs a series of guided movements to train people to use their bodies in ways that relieve stress and alleviate pain. "We teach people to understand how the brain and body work together and to consciously alter motions to make the body more integrated," explains teacher Thomas Lemens.

A typical "course" is 28 sessions, but for patients with severe problems—such as a 34-year-old whose knee injury had immobilized her completely—it may take longer. The knee patient had been to a number of medical doctors and was in physical therapy when she came to Lemens four months ago. "Now I can walk over seven miles," she says.

Institute for the Alexander Technique, Thomas Lemens, 295 Seventh Avenue, near 27th Street (989-9256); hours by appointment. Initial consultation, $70. Lemens will also make referrals.

American Center for the Alexander Technique, 142 West End Avenue, at 66th Street (799-0468). The center has listings of 57 teachers in the New York area and also operates as a training center.

The Feldenkrais Method. Through his understanding of how human movement is learned, and through his knowledge of the many subtle interrelationships between the neurological and muscular systems, physicist Moshe Feldenkrais

has devised a method that is popular with athletes and dancers and has also had miraculous success with orthopedic problems and other debilitating diseases. The idea is to retrain the body, which in turn reprograms the brain. Feldenkrais calls the people he works with "pupils" and the sessions "lessons." There are two aspects of this method: Functional Integration is done on a one-to-one basis, during which the practitioner slowly and gently manipulates the student's body; Awareness Through Movement, usually taught in groups, is exercises that help you understand what your body is doing when it moves. Says Feldenkrais, "Until you know what you are doing, you cannot do what you want."

The Feldenkrais Method, 104 East 40th Street (986-9639); can refer people to one of the four authorized practitioners in New York and lists Awareness Through Movement classes.

Myotherapy. After two hip-replacement operations, exercise expert Bonnie Prudden developed "myotherapy." Prudden found that applying seven seconds of pressure to the trigger points causes muscles to relax and stops the pain-spasm cycle. Janet Chance, a therapist at the New York area's only myotherapy clinic, says there's a 72 percent correlation between the acupuncture meridians and the lines used by myotherapists. At this center, myotherapists (graduates of Prudden's two-year course in Stockbridge, Massachusetts) spend 60 to 90 minutes with patients, who are also given exercises to do at home at least three times a day, so that muscles don't tighten up again. A nice feature of this program is that the myotherapist will help a family member or a close friend master the pressure techniques so the patient doesn't have to keep coming back.

Bonnie Prudden Pain Erasure Clinic, Westbury Medical Center, 309 Madison Street, Westbury (516-997-6707); Monday through Friday 9 a.m. to 5 p.m.; some arrangements made for evenings and Saturdays. Initial consultation, $95. By physician referral only.

Back Care and Posture, Y.W.C.A. Four hundred people a year go through this eight-week program, designed twenty years ago by Dr. Sonya Weber and geared to building up weakened abdominal muscles, correcting posture, and relieving tension and stress on the back. Regular exercise programs may irritate the lower back, but here everything is geared to help—and to make you more aware of what kinds of activities to avoid and what you *can* do.

Y.W.C.A., 610 Lexington Avenue, at 53rd Street (755-4500); call for information; eight-week course is $46 for members, $25 for a one-year membership. In June, this Y is also offering a one-night mini-course based on Bonnie Prudden's myotherapy.