



NEW HOPE: Matallana, at home in California, was once so sensitive that wearing jewelry hurt

Fibromyalgia: Not All in Your Head

Thanks to brain-scan technology, this 'imaginary' ailment of 6 million people is proving to be very real

BY ANNE UNDERWOOD

FOR YEARS, LYNNE MATAALLANA couldn't wear jewelry. The pressure of a necklace or watch against her skin burned "like a blowtorch." Lying in bed under cotton sheets was agonizing. Friendly handshakes sent pain shooting up her arm. Matallana, 48, of Orange, Calif., went to 37 doctors over the course of one year before she received a diagnosis of fibromyalgia—a condition involving pain throughout the body, heightened sensitivity to touch, and fatigue. And she thinks of herself as one of the lucky ones. "Patients used to go for decades without diagnosis or treatment," says Matallana, who went on to found the

National Fibromyalgia Association in 1997.

Until recently, doctors didn't believe fibromyalgia pain was real. They thought it was "all in the heads" of sufferers, who happened to be mainly women. When Dr. Muhammad Yunus of the University of Illinois began studying it in 1977, colleagues warned him, "You'll ruin your career. These women are just crazy." But the fact that doctors couldn't find a cause or a cure for some 6 million sufferers didn't mean that the pain wasn't there. In the past few years scientists have used powerful brain scans to prove that it is. Researchers have now pinpointed genetic variations that may play a role, and companies are racing to provide effective drugs. "It's a

new day in fibromyalgia," says Dr. Andrew Holman, a Seattle rheumatologist who's testing promising new pills. "We're starting to win the battle."

Fibromyalgia was thought to be imaginary largely because there's no obvious source of pain—no injuries, worn joints or pinched nerves. Instead it's one of a number of poorly understood disorders, such as chronic fatigue and gulf-war syndromes, that are caused by "central sensitization"—or imbalances of chemicals and hormones in the nervous system. In fibromyalgia, sensory messages to the brain are intensified, making even a warm bubble bath feel like torture. Countervailing messages from the brain are too weak to shut off the pain response. The combined effect is to "turn up the volume on pain," says Dr. Daniel Clauw, a rheumatologist and professor of medicine at the University of Michigan.

Clauw used functional MRI scans to provide the first objective proof that fibromyalgia pain is real. In a study published last year, he took 16 sufferers and 16 unaffected volunteers and applied a small amount of pressure to their left thumbs. In the fibromyalgia patients, blood rushed to areas of the brain involved in pain perception. The healthy volunteers might just as well have been getting a manicure. Clauw had to double the pressure on them to elicit the same pain response that he saw in the afflicted group.

The challenge now is to explain why. Recent tests suggest that people who develop the syndrome start with a genetic predisposition. The disease runs in families, and researchers have identified at least one gene that appears to be involved. But lifestyle and temperament also play a part. Often patients are workaholics who push themselves to the limit, despite years of escalating pain. Then a trigger—a car accident, a viral infection—pushes them over the edge and knocks their nervous systems out of whack. Researchers have consistently found that patients have three times more of a pain-transmitting chemical called substance P in their spinal fluid and too little of the pain-reducing chemicals serotonin and norepinephrine.

Understanding the syndrome will ultimately lead to better treatments. (Therapy now centers on such low-tech approaches as improving sleep quality and doing low-impact aerobic exercise, both of which help rebalance the nervous system.) But Pfizer is developing a new fibromyalgia drug that works, in part, by reducing substance P. Cypress Bioscience is testing another that boosts pain-suppressing norepinephrine and serotonin. For Matallana, a life once full of pain now holds a great deal of hope. ■