

Stanford Hospital Health Notes

A community health education series from Stanford Hospital & Clinics

Taking Your Life Back from Pain's Control – with Mind, Body and New Medical Vision

Suzanne Ely was not yet 30 when she began to notice numbness and tingling in the fingers of her right hand. Then came the fiery pains, as shattering as electrical shocks, that shot up and down the inside of her right arm from wrist to elbow.

She couldn't figure it out. She hadn't hurt her arm in any way. Finally, she realized that the injury was probably the hours and hours of taking notes by hand each day at her job. Little by little, the pain bit into her ability to do the simplest things – like opening the door to her office.

The Menlo Park woman wasn't a complainer. "I love what I do and I didn't want not to work," she said. That was why, when doctors said they could move what they believed to be the problematic nerve, she took a chance. But that surgery, and then another one, didn't work. If anything, the pain was worse, harshly altering Ely's life. After six months of not being able to work and isolated by increasing depression, frustration and dependence on others to do even small tasks, she turned for help conveniently close to home – the Stanford Hospital & Clinics' Pain Management Center.

She is one of thousands enduring acute and chronic pain who arrive each year at the Center because nothing else has worked and no one else could make a difference.

Ely had great hope for what she might find at Stanford's Pain Management Center. It is just one of 12 treatment facilities in the U.S. to win the American Pain Society's designation as a Center of Excellence. That status honors the Stanford clinic for its special combination of multi-disciplinary expertise, cutting-edge therapies and clinical research, delivered in a sympathetic and sensitive setting. "If it hurts, we take care of it," said the Center's director, Dr. Sean Mackey. "We have always been known as the place to send the most complex patients."

"We don't just treat someone as an injured leg or back. We take a look at the whole person."

— Dr. Sean Mackey, Pain Management Center director

Thinking differently about pain

The Center's clinical philosophy sees patients from a mind-body perspective – an approach that data shows to be a powerful enhancement for healing. "We don't just treat someone as an injured leg or back," Mackey said. "We take a look at the whole person."

Treatment begins, as it did with Ely, in an extensive evaluation by a team of physicians, nurses, physical and psychological therapists and other staff to fashion a customized and broad-ranged treatment plan. "We explore all the options," Mackey said.

Ely's diagnosis was one that reflects a common, but one of the most chal-



With her pain diminished, Suzanne Ely again can work full-time and enjoy a full life.

Norbert von der Groeben

lenging, pain conditions. Her evaluation showed she suffers from complex regional pain syndrome, a chronic pain ailment described first by a Civil War surgeon caring for soldiers still in pain despite the healing of their musket wounds.

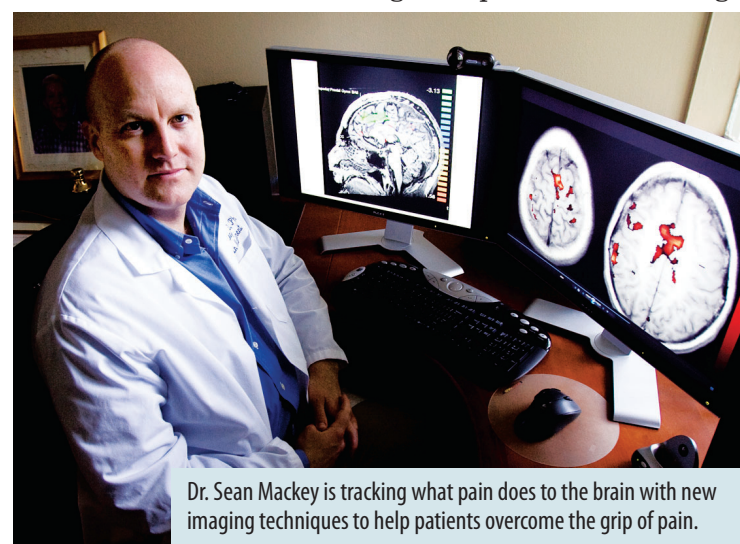
Mackey and others have gained important ground in understanding such chronic pain and the Stanford pain clinic was one of the first to incorporate the medical community's new thinking about pain. After a time, pain can become chronic, taking on a life of its own, altering brain activity and the nervous system to become its own disorder, even after an original injury has healed. Such pain can surpass its original level.

That newly-recognized pain behavior is what Mackey hopes people can avoid by not waiting to see a physician about their pain. "We do believe that it's much better to catch it early on to reduce the overall impact – and prevent it from becoming an intractable problem."

The precise nature of pain is still so difficult to understand and eradicate that effective treatment requires pain specialists such as those working and being trained at Stanford.

Pain's disruption of Ely's life is, unfortunately, not unusual. More than 50 million Americans are estimated to be living with pain so debilitating that it is costing billions in lost work and medical care. And many times its cause may be unclear.

Research to understand its behavior and how to manage it has only recently begun to find explanations and solutions.



Dr. Sean Mackey is tracking what pain does to the brain with new imaging techniques to help patients overcome the grip of pain.

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When to see a doctor about pain

See a doctor if any of these symptoms occur

- If your pain persists for more than three months
- If your pain includes numbness and tingling
- If your pain includes fever, chills, dizziness or vomiting
- If your pain is severe and persistent
- If your pain is interfering with your ability to work or sleep

Where to find more information

- Stanford Pain Management Center (650) 723-6238
- The Stanford Health Library collection includes dozens of books about pain, a database with the latest results on pain research and management and videos on several pain-related topics, including meditation and guided imagery. The Library also hosts talks by specialists like Dr. Sean Mackey and special classes. Starting in September, the Library will offer a two-part workshop for parents with chronic illness and a six-class series on managing chronic illness. Mackey will speak about fibromyalgia in October.
- The Library's main branch is at the Stanford Shopping Center. Other branches are at Stanford Hospital & Clinics, 300 Pasteur Dr., Palo Alto and at the Stanford Cancer Center, 875 Blake Wilbur Dr. Call (650) 725-8400 or visit www.stanfordhospital.com/healthLib/.
- www.ampainsoc.org: The American Pain Society's webpage has an extensive list of helpful and informational organizations on its Resources page.

Cutting-edge therapies to regain a good life

Mackey's team has headed ground-breaking clinical trials in the use of MRI technology to reveal the location of the brain's pain centers and how people might learn to control their pain. "It's all about improving a patient's quality of life," Mackey said. "What people want most is to take back control of their life."

That's what Ely wanted to do, of course. The Stanford Pain Center is the location for more than dozen trials for new treatments which often can become part of its patients' treatment plans, as one did for Ely. She was an early recipient of one of the Center's newest approaches – Botox injected directly into a nerve center. Others have benefited from implant pumps to deliver paced doses of medication and implanted stimulators to convert pain to a tingling, buzzing sensation.

"I have tried a lot and I know it could be worse, but I'm able to work and I can lead a relatively normal life."

— Suzanne Ely, Pain Management Center patient

Engaging the brain to change pain

Mackey is excited about emerging tools to improve outcomes, including Ely's – new medications to target specific locations in the nervous system,



For many months, Suzanne could not do the simplest of tasks, including preparing meals. Now, she's able and independent in the kitchen.

new interventions to prevent pain and new ways to predict whether a certain patient will respond to a certain treatment. Where Stanford's Pain Center is most advanced is neuroimaging to create very clear windows into the brain to watch how it responds and generates pain. "We can learn to take advantage of the power of the brain to change," he said, "and

those changes can have a real impact on our whole body's physiology – for the better."

The Pain Center will move next year to the new Stanford Medicine Outpatient Center in Redwood City, to consolidate and enlarge its clinical space.

Ely worked her way through the package of treatments designed for her – the nerve blocks, medication, physical and psychological therapy and acupuncture – each with its own impact. But one of chronic pain's uncomfortable realities is that sometimes there is no complete fix. That's difficult to accept in an age where medicine has conquered so many ailments. Then, the goal at the pain clinic becomes changing chronic pain from incapacitating to manageable. "No one should be sentenced to live with pain forever," said Dr. Ian Carroll, a pain center doctor. "We can help people live a better life despite it."

Ely's pain isn't completely gone, but her treatment at Stanford gave her back her independence and her work. Now, she understands the role played in her pain by anxiety and distress and has tools, including mindfulness meditation which she learned at Stanford, to ease her ability to moderate her stress, prevent flare-ups and get a good night's sleep.

"I'm getting the strength back in my arm. I have tried a lot and I know it could be worse," Ely said, "but I'm able to work and I can lead a relatively normal life." Once again, she can cook, open doors and work full days, as well as do those simple acts so important for a balanced, full life. "I'm able to carry things I couldn't carry – like my four-year-old nephew! I have definitely improved."



Learning how to defuse stress in her daily life was an important part of Suzanne's re-entry into the world where entertaining at home was not an impossibility.

Norbert von der Groeben

Stanford Hospital & Clinics is known worldwide for advanced treatment of complex disorders in areas such as cardiac care, cancer treatment, neurosciences, surgery, and organ transplants. Consistently ranked among "America's Best Hospitals" by U.S. News and World Report, Stanford Hospital & Clinics is internationally recognized for translating medical breakthroughs into the care of patients. The Hospital is part of the Stanford University Medical Center, along with the Stanford University School of Medicine and Lucile Packard Children's Hospital at Stanford.



Stanford University Medical Center