

By *Staishy  
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**Ann Mayo** suffers from psoriasis, a chronic, immune-mediated skin disease. A red, scaly rash used to cover most of her body, making her self-conscious and reluctant to even wear shorts in the summertime.

But that was before she came to The University of Texas Southwestern Medical Center at Dallas.

"The rash was unsightly," the Dallas dental hygienist said. "The skin lesions looked horrible – some of them were the size of baseballs."

Ms. Mayo saw several dermatologists and tried creams and other medications but nothing worked. Last January, she contacted the dermatology clinic at UT Southwestern – one of the few institutions in the Dallas area to take a cue from the sun and use

ultraviolet rays to treat patients with skin diseases such as psoriasis.

The treatment is called phototherapy.

"This is a therapeutic way to administer a very specific spectrum of ultraviolet light, one component of sunlight," said Dr. Heidi Jacobe, assistant professor of dermatology who oversees the phototherapy unit.

Phototherapy can target large areas of skin without the side effects of oral or topical medica-

tions. It works by basically resetting the immune system, thus preventing the body from attacking itself. And it's effective for other skin conditions besides psoriasis.

Phototherapy is often prescribed for patients suffering from conditions such as mycosis fungoides, a type of non-Hodgkin lymphoma that first appears on the skin, and itching related to end-stage renal

## UV can be skin's salvation

disease, liver disease and HIV. The therapy is also helpful for people with vitiligo, a condition especially common in African-American, Hispanic and Asian populations, in which patients suffer a patchy loss of pigment, and atopic dermatitis, the most severe form of eczema, characterized by inflamed, dry, itchy skin.

"It has worked fantastically for me," Ms. Mayo said, adding that her lesions are almost gone. "All that's left are two itty-bitty, pencil-eraser-size dots – one on each leg. They are no more than just dry patches of skin."

During phototherapy treatment, the patient stands in a vertical box – imagine a cross between a phone booth and a tanning bed – and soaks up UV rays for about 30 seconds on the first visit. Sessions could eventually last five to 10 minutes. Initially, patients return to the clinic two or three times a week, but visits usually taper off as treatment progresses.

UT Southwestern dermatologists recently began offering a new, localized form of phototherapy called UVA-1. The new therapy emits a narrower band of light that has the potential to penetrate more deeply into the skin, is more focused and intense than older technology, and doesn't usually burn the skin in therapeutic doses. It is used to treat some patients with eczema, especially those with hand dermatitis or dyshidrosis, and morphea, thought to be an autoimmune disease that is localized to the skin and causes it to thicken and discolor.

Phototherapy isn't for everyone, Dr. Jacobe said. People with a history of melanoma and some other types of skin cancer are not candidates for the treatment, which may increase some patients' risk of skin cancer. Shielding areas that don't need attention, using the minimum effective doses, and limiting the number of treatments minimize this risk, Dr. Jacobe said.

Ms. Mayo said the risk has been worth the results. She's looking forward to wearing shorts next summer.\*



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By Stephen J.  
O'Brien

It doesn't show up on an MRI or CT scan. Blood tests or X-rays can't confirm that it's there. But when it comes to chronic pain, you only have to ask someone who suffers from it to know it exists.

"There's no way to explain how much chronic pain impacts your life," said Marion Tassin, a 47-year-old mother of four. "There are days when you just can't do the simplest things. It's very hard on the person suffering and the people around them."

In May 2001, while working at her family's cattle ranch near Waxahachie with her two youngest boys, Mrs. Tassin first felt the chest pains that would become part of her everyday life.

"It felt like a gorilla was sitting on my chest," she said. "I basically collapsed."

In the emergency room, doctors eventually diagnosed her with pericarditis – inflammation of the lining of the heart – a chronic, but not life-threatening condition resulting in pain and fluid buildup. In search of relief from the excruciating pain, Mrs. Tassin traveled across the country and consulted with numerous doctors. Improvements were minimal.

The litany of recommended treatments was dizzying. She was put on steroids, taken off steroids, put on opiates, taken off opiates, told it was in her head, told she needed surgery.

"Then along came Dr. Lou," Mrs. Tassin recalled.

Dr. Leland Lou, director of the Eugene McDermott Center for Pain Management at The University of Texas Southwestern Medical Center at Dallas, immediately decided to try nerve blockers to deaden the chest pains that radiated down Mrs. Tassin's back and arms.

By testing local anesthetics on different locations along Mrs. Tassin's spine, Dr. Lou began to pinpoint where the nerves sending and receiving the pain signals were located. Eventually, he hit the bull's-eye.

"I remember the moment. I had tremendous results right away," Mrs. Tassin said. "It was amazing."

With the trouble spot identified, Dr. Lou recommended a spinal-cord stimulator, a unique device that uses low-level electrical signals to vibrate the aggravating nerves, converting the pain signals to a tingling sensation. The frequencies are sent through a small catheter directly into the epidural space

## A pre-emptive pain strike

around the patient's spinal cord. An external remote control sets the signals.

Mrs. Tassin will be fitted with a permanent stimulator later this year. The device will be implanted under the skin near her hip, delivering the needed electrical impulses.

"It stimulates the nerves to inhibit their interpretation of pain," Dr. Lou said of the device. "The electrical signals convert the pain into a more innocuous feeling. The device is not new, but using it for pericarditis is quite rare."

Mrs. Tassin's case highlights the two-part philosophy of Dr. Lou and his colleagues at the McDermott Center: Employ the latest technology, but first exhaust the least-invasive procedures.

Dr. Lou and his team are working on treating other sources of chronic pain, including neck injuries, with minimally invasive procedures. Chronic neck pain, often caused by automobile accidents or other traumatic events, can send aches and pains to all parts of the body. Pinpointing the genesis of the pain can be difficult, and treating it often involves surgery.

But doctors in the McDermott Center are using a variety of techniques to locate the source of the pain and to "stun" the nerves transmitting pain signals.

One technique – dedicated fluoroscopy – uses an X-ray system to allow physicians to target precisely where to apply pulse radiofrequency therapy, which interrupts pain messages to the brain, or, more simply, where to inject a local anesthetic.

"We can often relieve patients' pain without surgery," Dr. Lou said. "That allows them to begin physical therapy sooner, saves money and, in the end, allows them to feel better quicker."

Mrs. Tassin still suffers from pericarditis. Doctors say she has one of the rare cases without a known cause, and they do not know when or if the condition will ever dissipate.

But in the meantime, you'll find her doing chores at the ranch, pain-free.\*

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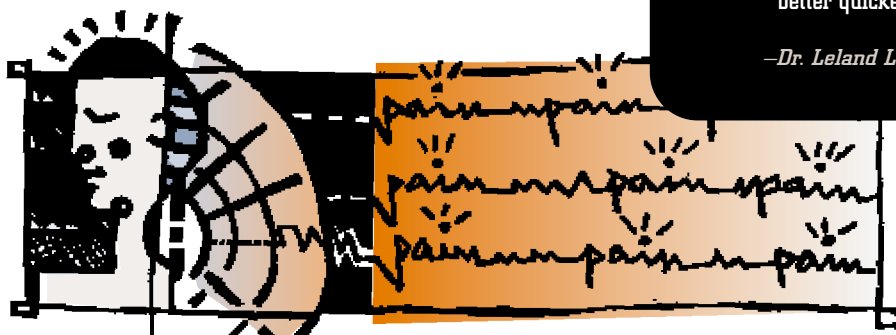
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–Dr. Leland Lou



By Susan Morrison

**Fight or flight:** Most wild animals live by this survival concept. They either run from an enemy, or they stay and battle it out.

But people, able to grasp the gray areas of life's situations, may be caught in a state of uncertainty. Rather than responding quickly, they feel anxious and behave indecisively. They worry and lose sleep. They experience fear and may avoid places, things and even other people. Although some level of anxiety is normal, and may even be helpful, excessive anxiety can disrupt lives and produce suffering.

"Anxiety is an emotion associated with the idea of threat. Threat is the perception that the person, his loved ones or his security is being threatened," said Dr. Robin Jarrett, professor of psychiatry at The University of Texas Southwestern Medical Center at Dallas. "We believe that anxiety must have some sort of survival value. All organisms need a signaling device to warn them of impending danger. The body has evolved to produce a physiological response when the brain signals that there is a threat. Anxiety signals taking actions that promote survival."

Today's world – with terrorism and war, Severe Acute Respiratory syndrome (SARS) and West Nile virus – creates challenges that complicate the average person's evaluation of what fears are "realistic," Dr. Jarrett said.

Anxiety disorders can develop when a person's perception of threat and the anxiety that follows are greater than the situation warrants. Dr. Jarrett said a

## Anxiety among us

lack of understanding or information can exacerbate anxious feelings.

"When the situation is ambiguous, a person's perception of threat may increase," she said.

Recent events have spiked anxiety in the average American, Dr. Jarrett said. Sept. 11, 2001, "shook the average person's understanding of risk. Each person had to develop his or her own way of coping.

"People who began Sept. 11 with very high levels of anxiety may have needed to turn off the newscasts because the continuous coverage taxed their ability to cope," she said. When people can "register" their baseline anxiety, they can then decide how much exposure to information is tolerable.

"People can look for ways to control their exposure to *some* environmental stressors," she said.

Dr. Jarrett noted other possible coping skills:

- Learn, admit and seek what you really need to stay healthy and free of excessive anxiety. "Most average people without underlying illnesses know what they really need. If you think about children, they know what they need – when they're hungry, when they need to sleep, when they want to play. They're good at getting those things that they need," Dr. Jarrett said. "Sometimes, with maturity, people ignore what they know they need. If there are simultaneous needs, prioritizing may help. Focus on one thing at a time, rather than the list of 10 things."

- Set aside time to think about what's important. "On Sept. 11, we were all changed. Whenever people think their time is shorter rather than longer, their ability to prioritize increases," she said.

- Listen to your emotions. "Emotions and the body may signal the need for change. If you're continuously anxious, that's a signal that something may need to change in your environment or in the way you perceive your environment," she said. "There may be some merit in deciding what precautions are reasonable and what aspects you can and cannot control."

- Be realistic, and learn about the causes of your anxieties. "Denial can be a pretty effective coping strategy, but it may be unrealistic in many situations," Dr. Jarrett said. "When precautions have been taken and when danger persists, acceptance of risk may be a useful strategy. In this situation, we all have a choice: Devote even more time to worrying, or accept that some risk is inevitable.

"How much time do we spend thinking about dying while we're living? We all have to accept that there is some risk involved in living, especially if we

"We all have to accept that there is some risk involved in living, especially if we are to live fully."

—Dr. Robin Jarrett

