

New cocktail of medicine helps surgical patients get back on their feet

February 21 2014

Mary Kay Drummond kept waiting for the pain to come after her Jan. 21 knee replacement surgery. She'd had her right knee replaced a year ago, and when it was time for her left, she braced herself for the discomfort and immobility she experienced the first time.

She kept waiting for the [pain](#), but it never came. Like Drummond, many hip and knee replacement patients at St. Clair Hospital in Mt. Lebanon, Pa., are waking up from surgery in less pain and getting back on their feet sooner, thanks to a new cocktail of medication administered during surgery.

The combination, which features the anesthetic Exparel, is for patients undergoing total hip and knee replacements. Dr. Brett Perricelli, an orthopedic surgeon at St. Clair, began using the cocktail in October 2013 and said he has seen dramatic improvements in patients' pain levels and recovery time.

"We know these are traditionally very painful surgeries," he said. "This has changed everything that I have previously learned about hip and [knee replacement](#)."

Exparel is a long-acting local anesthetic, and it works much like Novocaine used in dentistry.

Perricelli said he has used this method on about 100 patients since he began four months ago, and now uses it on every patient because he is so

convinced of its benefits.

The treatment is a multimodal analgesia, or a series of painkillers in various forms. Before surgery, patients receive the painkiller Celebrex and a scopolamine patch to reduce nausea.

During the procedure, Perricelli injects the local anesthetic Exparel, suspended in a fat molecule, into the surgery site. The molecule is genetically modified to slowly release the medication, allowing for pain relief up to 72 hours after surgery. Patients also receive tranexamic acid intravenously to reduce bleeding.

The benefits are twofold: a decreased need for narcotics and increased mobility soon after surgery. When patients wake up with less pain, they are less apt to need narcotics after surgery. Narcotics, though effective in subduing pain, come with various side effects that include grogginess, nausea, urinary retention, confusion and the risk of addiction. After surgery, patients receive the non-narcotic painkiller acetaminophen intravenously for 24 hours or Ultram, another oral pain reliever. Perricelli said patients are still able to take narcotics if needed, but a majority of his patients do not.

Another benefit is the decreased use of nerve blockers during surgery, previously a common practice for hip and knee replacements. The absence of nerve blockers, which relieve pain but delay mobility after surgery, gets patients back on their feet faster. Many patients receiving this treatment are able to walk with assistance the day of surgery. Patients can begin physical therapy sooner. Expedited mobility also decreases the risk of blood clots, which can occur with prolonged inactivity.

For the medical professionals involved, the new treatment was a shift of both procedure and philosophy.

"For years, it was 'You're in pain, you get narcotics,' and then managing all the adverse effects of narcotics," he said. "It's a complete paradigms shift."

"The staff grabbed the concept and ran with it," he said. "They're with the patients 24/7, and they taught me a lot about how to make the entire protocol better."

Although he hasn't officially named the treatment, happy nurses and aides have their own nicknames, including "Painless Perricelli" and "special sauce."

Based on early analyses by St. Clair, the new protocol is more cost-effective because patients are taking fewer narcotics and have shorter hospital stays and more effective physical therapy.

Cindy Crock, a registered nurse in the post-anesthesia care unit at St. Clair, treats patients immediately after surgery. Since joining St. Clair in 2000, she has seen many joint replacement surgeries, recounting how previous methods left patients in a great deal of pain. Now, patients coming into the recovery room are nearly pain-free.

"We've been telling all the other doctors, you should check this out," she said.

Megan Shilling, rehabilitation director for Interim HealthCare, has conducted [physical therapy](#) for orthopedic patients for nearly two decades, including many years for Perricelli's patients. She said she has seen a "night-and-day difference" between patients receiving standard pain management practices and the "Painless Perricelli."

"I've been doing this 17 years. After the first patient came in with no pain, walking on a cane two days after surgery, I thought it was a fluke,"

she said. "It isn't a fluke."

"It's going to do wonders," she said.

Crock said although patients are feeling great and moving around well, they have to be careful not to push their limits after surgery.

"People might push themselves too hard because pain used to be their guide," she said, adding that [patients](#) must remember healing will still take time, no matter the pain level.

Surgeons across the country have also begun to use similar procedures with Exparel for orthopedic surgeries, including doctors in Texas, South Carolina, Maryland and Ohio.

Around Pittsburgh, surgeons at UPMC and West Penn Allegheny Health System are investigating potential benefits of Exparel.

A UPMC spokesman said The Bone and Joint Center at Magee-Womens Hospital of UPMC awaits word on its application for a grant to conduct a clinical trial with Exparel.

Doctors at Allegheny Health Network are conducting a trial to look at medical and cost effectiveness of using Exparel for similar surgeries.

"I think it does have potential," said Nicholas Sotereanos, an [orthopedic surgeon](#) with Allegheny Health. "But do I think this will be painless knee surgery? I say no."

Drummond, 59, who had her left knee replaced Jan. 21, using the Exparel cocktail, contrasted that experience with her earlier surgery on the right knee, when she received a combination of narcotics and nerve blockers.

She called the difference "amazing."

"There's no other word for it," she said. "I am weeks ahead of where I was on the last one."

Following her first surgery, Drummond used a walker for 2{ weeks and a cane for several weeks after that. She said she experienced significant pain and limited range of motion after surgery.

When Perricelli explained the new regimen for the second knee, she was skeptical.

"I had a hard time believing it would be that much different because it had only been a year since my last surgery," she said. But Drummond said she left the hospital a day earlier than the last surgery and used the walker for four days before walking unassisted.

She expects to return to work six weeks after [surgery](#), compared to the nine weeks she spent at home last year. Most importantly, she said, is that she hasn't taken narcotics, and is feeling healthier and more aware during her recovery.

Drummond said overall she expects the time for her to be completely back to normal to be about the same for both surgeries. But, she is feeling a lot better in the meantime.

©2014 Pittsburgh Post-Gazette
Distributed by MCT Information Services

Citation: New cocktail of medicine helps surgical patients get back on their feet (2014, February 21) retrieved 11 May 2024 from <https://medicalxpress.com/news/2014-02-cocktail-medicine-surgical-patients-feet.html>

This document is subject to copyright. Apart from any fair dealing for the purpose of private study or research, no part may be reproduced without the written permission. The content is provided for information purposes only.