

Women's Health Overview

Pain Management: A Biopsychosocial Approach to Chronic Pain

Sometimes we have a flare of our chronic pain, which can derail us from progressing with pain management, as we believe we may have a new (acute) injury. If we did not do anything to cause a new injury, then this is likely just a flare of the same old chronic pain problem. Accepting that the pain is chronic helps a person move forward to find the best ways to effectively manage and cope with the pain.

Increased sensitivity of the central nervous system occurs when we have chronic pain. This can cause symptoms like increased pain with activity, touch, weather changes, stress, illness, and increased sensitivity to sound and light, among many other symptoms. Central sensitivity can also cause interference with sleep and concentration. These are symptoms of real changes in our central nervous system so to treat chronic pain, we must first learn how to calm this system. In a biopsychosocial model of care, we address the physical, emotional, cognitive, behavioral, and social factors of chronic pain. You can improve your pain management by doing the following:

- Perform or start an exercise program at your current level of tolerance and gradually increase your activity level
- Avoid the mindset of "if it hurts, I shouldn't do it." Remember, for acute illness or injuries, a short period of rest to allow healing is helpful. For chronic pain, it is best to be active, build strength and maintain full use of your body
- Pace your activities by not overdoing it on days when you are feeling better. Stay with your plan no matter if you feel better or worse that day and alternate periods of activity with planned rest breaks

see Chronic Pain pg. 4

Facts About Chronic Pain in America

Patients with acute and chronic pain in the U.S. face a crisis because of significant challenges in obtaining adequate care, resulting in profound physical, emotional, and societal costs. According to the Centers for Disease Control and Prevention, 50 million adults in the U.S. have chronic daily pain, with 19.6 million adults experiencing high impact chronic pain that interferes with daily life or work activities.

- 50% of the 50 million people who suffer from daily chronic pain are senior citizens
- Leading cause of adults being on long-term disability is chronic pain
- Chronic pain costs the economy roughly \$560 billion a year (more than heart disease, diabetes and cancer combined)

Source: U.S. Department of Health and Human Services (2019, May). Pain Management Best Practices Inter-Agency Task Force

Report: Updates, Gaps, Inconsistencies, and Recommendations



overview

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From the Chairman

One of my mentors was fond of saying, "The problem isn't what we don't know. The problem is that so much of what we do know isn't so." Science in general, and medicine in particular, are filled with numerous examples that support this contention. In clinical medicine, we often refer to this as a swinging pendulum. On one occasion we handle a problem in this way. Months, but usually years later, and after a period of scientific study, we do it another way. For the patient, this rarely results in changes in treatment as the pendulum swings slowly. The same is not true for providers, particularly those of us that have been around for a while. In fact it drives us a little crazy. In obstetrics the management of labor, the use of forceps and the delivery of breech babies are examples of this.

In this edition of our newsletter, we discuss another one of those subjects affected by the pendulum — pain management. In the span of my career we have gone from a time of limiting the use of opioids to control pain, to using them liberally, and back to limiting their use once again. At every juncture, these changes have occurred for good reasons. There is no question we are currently in the middle of an opioid epidemic. The number of opioid-related deaths exceeds those of traffic accidents. Alternatives to their use are in the best interest of all of us. In this issue, some of these alternatives are discussed. Given the number of patients suffering from chronic pain, the message is timely.

Care Ugent

Carl V. Smith, MD, FACOG Chairman Department of Obstetrics and Gynecology College of Medicine University of Nebraska Medical Center



research news

Bones Need Exercise, Too!

Messages encouraging women to exercise are plentiful — with benefits ranging from heart health to maintenance of independence. Historically, women were encouraged to participate in exercise that improved cardiovascular health, like walking and aerobic exercises. More recently, the message to women, especially in middle age and later life, has been to lift weights, maintain strength and preserve the ability to participate in activities important to them. Among this messaging, one key system is missing, exercise for bone health.

Bone health is important across the lifespan as it helps with posture and mobility. Peak bone mass is achieved around 30 years old and rapid bone loss begins around menopause.

Maintaining healthy bones depends on many factors, including genetics, diet, healthy habits, and yes, even exercise. Though we often associate fracture with a diagnosis of osteoporosis, 50% of those who fracture are not yet considered osteoporotic. So, keeping bones healthy is important, regardless of the current clinical status of your bones. The great news is that persons who exercise regularly have a lower risk of fractures.

This is likely due to improved balance from exercise as well as stronger bones. After menopause, exercise slows the decline in bone density. Our research has shown that exercise may also strengthen bones by influencing their size and shape. For example, consider a tree trunk versus a tree branch. The trunk is significantly thicker than the branch and much harder to break. In the same way, exercise alters bone shape and size such that they are more resistant to fracture.

What exercise is good for bones? Ideally, exercises for bone health would include weightlifting combined with exercises that cause impact through the legs. For weightlifting to strengthen bones, you should exercise all the major muscle groups (example: legs, arms, back and abdominal wall), and especially the hips.

The weight should be high enough that you can only lift it about 8 to 12 times before you can't lift it anymore. But don't start with this weight. That would make you sore and could cause injury. Start slowly and work up to this level of weight resistance over three to four weeks. For best effect, do each exercise twice (two sets) and lift weights three times per week.

Calisthenics, going up stairs, or walking steep hills are examples of exercises that create impact through the legs and are a great complement to weightlifting for a wellrounded, bone-strengthening regimen.

One more note: Don't despair if your bone scan doesn't show increased bone density after you implement a new exercise program. Our research suggests exercise does not necessarily help to build new bone, it simply helps prevent bone loss, and may change bone size to make it stronger.

Best of luck with your exercise! Congratulations on taking steps to prevent future bone fractures.

Contributed by Laura Bilek, PT, PhD and Laura Flores, PhD

UNMC College of Allied Health Professions Department of Health & Rehabilitation Sciences Chronic Pain continued from pg. 1

- Have a proactive plan for your day or week instead of being reactive and behaving in a way that is dependent on your pain level
- Learn how to relax the central nervous system directly with techniques like guided imagery, mindfulness meditation and diaphragmatic breathing, which can help especially when you are having a pain flare, or feeling anxious, depressed or overwhelmed
 - » Download the free Breathly app for a visual aid to "box breathing," which is a type of breathwork that can shift your energy, connect you more deeply with your body, calm your nervous system, and decrease stress in your body
- Utilize a positive thinking log or gratitude journal, which can help you to move from "Why me?" to "I can handle this!" How you think and feel about your pain problem is extremely powerful, and critical to your success (or your struggle)
- Try to not talk excessively about your pain, but instead communicate your needs with loved ones and stay involved with activities you enjoy

Making consistent behavioral choices about our pain management and using a proactive approach will make it easier over time to utilize effective pain management and coping strategies. This model of care is the foundation of the Nebraska Medicine Chronic Pain Management Program, which is an interdisciplinary program including physical therapy, psychology and medical management. For more information, contact our program coordinator at 402.559.4364 or visit www.NebraskaMed.com/Pain/Management-program.

Contributed by Lori Long, PT, DPT and Kimberly Vacek, PhD

Nebraska Medicine Chronic Pain Management Program | Nebraska Medicine Patient Centered Medical Home, Bellevue Family Medicine

Do I Need a **Pap Smear** If I'm Vaccinated For **HPV**?

If you have completed your Gardasil vaccination series against human papillomavirus, congratulations! You have significantly lowered your risk of cervical dysplasia (pre-cancer of the cervix), cervical cancer, and other HPV-related cancers. A study that followed women for four years found that if they received Gardasil before exposure to HPV, Gardasil was nearly 100% effective at preventing high-grade dysplasia (FUTURE II).

So, that means I can skip getting pap smears, right? WRONG. There are over 100 strains of HPV, and the most current iteration of Gardasil only covers the nine strains most likely to cause cancer. The vaccine will not completely prevent HPV infection, but it will give your body a major advantage in getting rid of the virus. Your susceptibility to HPV infection will increase or decrease according to the strength of your immune system, which will evolve over time depending on your age, smoking status, and other medical problems. Nearly all cervical cancer cases are related to HPV, so it is still important to visit your OB-GYN annually for your wellness exam and to receive cervical cancer screening based on guidelines appropriate for your age and health history. With a combination of pap smears and HPV vaccination, you

Contributed by Andreea Newtson, MD

UNMC Department of OB-GYN, Division of Gynecology Oncology



Mission Statement

The mission of the Olson Center for Women's Health is to provide a national comprehensive health science center at the University of Nebraska Medical Center (UNMC). Based in the Department of Obstetrics and Gynecology, the center enables UNMC to make distinctive strides in education, research and service through innovative approaches to women's health issues.

Want More Information?

Visit our website: OlsonCenter.com

Learn more about our health care providers, services and programs available at the Olson Center for Women's Health. Our website also offers women's health information. Here are a few topics:

- Breastfeeding
- Breast health and disease
- Cardiovascular health
- Gastrointestinal health
- Gynecologic health
- Incontinence
- Reproductive endocrinology/infertility
- Pregnancy
- Wellness
- Incontinence

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25th Annual





Adaptability, Resiliency, Hope

Friday, Oct. 7, 2022 8:00 a.m. to 4:30 p.m.

HYBRID EVENT We are committed to your safety. Due to the COVID-19 pandemic, we will offer a limited number of in-person registrants and an unlimited number of virtual registrants.

2022 Conference Presentations

In-person live attendance prices

General registration – \$75 Nurses and social workers – \$110 Continuing education will be provided with paid registration.

La Vista Conference Center 12520 Westport Parkway La Vista, NE

Virtual live attendance prices General registration – \$15 Nurses and social workers – \$50 Continuing education will be provided with paid registration.

To Register

Visit **OmahaWomensHealthAndWellness.com** or call **402.559.6618** if you cannot register online Registration deadline: Sept. 30

Questions?

Call the Olson Center for Women's Health at 402.559.6345

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University of Nebraska Medical Center Nebraska Medicine

"The Healing Power of Humor" T. Marni Vos, comedian and educator "Messages of Hope: Persevering Through a Pandemic" Brandy Clarke, PhD, LP, UNMC Munroe Meyer Institute "Pain Treatment or Pain Management: A Biopsychosocial Approach to Chronic Pain" Kimberly Vacek, PhD, Nebraska Medicine Bellevue, Family Medicine Clinic Lori Long, PT, DPT, Nebraska Medicine Chronic Pain Management Program "Cervical Cancer" Breakout Session Andreea Newtson, MD, UNMC Department of Ob/Gyn, Division of Gynecologic Oncology "You're Not Alone: Caring For our Family Members with Disabilities Across the Lifespan" Breakout Session and Panel Discussion Kim Bainbridge, UNMC Munroe Meyer Institute, retired; Maggie Neujahr, CSW, UNMC Munroe Meyer Institute; Jason and Tina Velinsky, parent advocates; Jenny Koley, self-advocate "Taking Control: Solutions for Bladder Leakage and Pelvic Prolapse" Panel Discussion Olson Center Urogynecology Division: Jennifer Cera, DNP, WHNP; Mindy Rathe, MSN, WHNP; Elizabeth Hopkins, DPT, PT; Brittney Gilligan, OTD, OTR/L "When Self Care is Difficult: Overcoming Barriers to Wellness" Panel Discussion Shinobu Watanabe-Galloway, PhD, UNMC College of Public Health, Dept of Epidemiology; Georgia Jones, PhD, UNL Nutrition & Health Sciences; Danae Dinkel, PhD, UNO School of Health and Kinesiology; Lauren Holcomb, PhD, Nebraska Medicine Psychology Department "My Special Olympics Journey — Intellectual Disabilities and Health" Rachel Mulligan, Special Olympics Athlete, and National Powerlifting Champion

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ADDRESS SERVICE REQUESTED

olsoncenter.com

The Olson Center for Women's Health welcomes **Dr. Carly Jennings**



Carly Jennings, MD, is originally from Cedar Rapids, lowa. She received her undergraduate degree in biology, with a minor in chemistry, from Concordia University in Austin, Texas, and her medical degree from Texas A&M College of Medicine in College Station, Texas. Gig 'em! Following medical school, Dr. Jennings did a year of general surgery in Chicago before making her way to Omaha to complete her OB-GYN residency at UNMC.

She lives in Omaha with her husband, Eric, and their two cats, Sunny and Luna. In her free time, she enjoys exercising, reading, walks with her husband, and checking out different restaurants around Omaha.

Dr. Jennings interests in OB-GYN are varied, but she particularly has an interest in minimally invasive gynecologic surgery, hormonal management for contraception, treating abnormal uterine bleeding, menopause, early pregnancy, and education for both medical students and residents.

To schedule an appointment with Dr. Jennings, call the Olson Center for Women's Health at 402.559.4500.

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In a biopsychosocial model of care, we address the physical, emotional, cognitive, behavioral, and social factors of chronic pain.

- 3 Research News Bones Need Exercise Too!
- 5 Omaha Women's Health and Wellness Conference

Register today! Join us on Friday, Oct. 7

