

EMBARGO LIFTS: Thursday, Nov. 14 at 10:00 a.m. ET

Media Contact: Monica McDonald

Office: (404) 365-2162

Email: mmcdonald@rheumatology.org

Corticosteroids: One Size Does Not Fit All

Researcher suggests that the risks and benefits of steroid medications should be considered before administering to patients

WASHINGTON, D.C.--Cortisone, a type of corticosteroid, was once hailed as a miracle drug, earning a Nobel Prize in 1950 for the physicians who discovered it. These drugs quickly became extensively used in the treatment of many inflammatory diseases. However, it was soon apparent that corticosteroids were a double-edged sword: able to rapidly control inflammation, but also causing dangerous side effects.

Beth Wallace, MD, an assistant professor at the University of Michigan and a staff rheumatologist at the VA Ann Arbor Healthcare Center, will discuss the risks, benefits and uncertainties around systemic steroid use as well as the potential for creating steroid-free regimens on Nov. 17 at <u>ACR Convergence 2024</u>, the American College of Rheumatology's (ACR) annual meeting, in Washington, D.C.

Even within expert groups, there are inconsistencies and contradictions between treatment guidelines contributing to uncertainties around use and safety of glucocorticoids. She references the 2021 ACR Guideline for the Treatment of Rheumatoid Arthritis (RA) that conditionally recommends against steroid bridging when starting a disease-modifying anti-rheumatic drug (DMARD), but the 2022 EULAR guidelines support it.

Despite these opposing viewpoints, she thinks providers are increasingly aware that even short-term and low-dose steroids may be toxic for some patients and that the newest ACR guidelines have helped change practice around steroid use for RA.

"We've known for decades that steroid risks are dose-dependent, especially when you get above 7.5 to 10 mg of prednisone per day," Wallace says. "The open question is whether the risks of steroid use in this range, especially long-term use, outweigh the benefits. This is hard to answer because a lot of the scarier steroid side effects take years to show up. We do have clinical trial data to show that long-term use of even low-dose steroids substantially increases the risk of infections. And we have lots of observational data suggesting that even short-term steroid use increases serious risks at a population level – things like sepsis, GI bleeding, cardiovascular morbidity."

Wallace says she uses steroids in her own practice, but her prescribing is nuanced and patient specific.

"I think the key to using steroids appropriately is to weigh the relative risks and benefits in each individual case," she explains. "There are life-threatening autoimmune conditions where we don't have effective steroid-sparing alternatives. Acute severe lupus cerebritis is a good example. There are other conditions, like ANCA vasculitis where we have effective alternatives, but we still need to use steroids sometimes. And then there is gout, where we have safe, effective alternatives for most people. If you absolutely need steroids to keep someone from dying, you're going to use steroids because you have to. But if you have choices other than steroids, then the risks matter more."

"I think it makes sense to frame conversations around steroid use in terms of a stewardship model, in the same way we do for antibiotic and opioid use. Thinking about 'steroid stewardship'— that is, in terms of risks and benefits rather than absolutes – can help providers justify using steroids when there is a net benefit and avoid using them when there is net harm," Wallace continued.

One important and fraught area Wallace has been studying is how best to wean patients off steroids.

She notes that up to three-quarters of people taking long-term steroids have withdrawal symptoms when they taper them. These symptoms are a huge reason why so many people remain on long-term steroids, despite their being safe and effective alternatives. Wallace was prompted to study steroid tapering and personalized tapering strategies because there is not an evidence base to guide dealing with withdrawal symptoms, leading to many providers applying a "one-size-fits-all" solution to tapering rather than figuring out the source(s) of a person's symptoms and addressing these more directly. She argues that depersonalized tapering likely leads to avoidable steroid use.

Wallace is a strong advocate for identifying clinical phenotypes of steroid withdrawal and learning about what causes them so they can be effectively addressed. Wallace's topline for patients and providers is that steroids are not all good or all bad.

"They have risks and benefits, and those risks and benefits aren't the same for every disease or every person. It's important to have clear, ongoing conversations about steroids and to recognize that these risks include withdrawal symptoms when long-term steroids are tapered."

###

About ACR Convergence

ACR Convergence, the annual meeting of the American College of Rheumatology, is where rheumatology meets to collaborate, celebrate, congregate, and learn. With hundreds of sessions and thousands of abstracts, it offers a superior combination of basic science, clinical science, business education and interactive discussions to improve patient care. For more information about the meeting, visit the ACR Convergence page, or join the conversation on X by following the official hashtag (#ACR24).

About the American College of Rheumatology

Founded in 1934, the American College of Rheumatology (ACR) is a not-for-profit, professional association committed to advancing the specialty of rheumatology that serves nearly 9,600 physicians, health professionals, researchers and scientists worldwide. In doing so, the ACR offers education, research, advocacy and practice management support to help its members continue their innovative work and provide quality patient care. Rheumatology professionals are experts in the diagnosis, management and treatment of more than 100 different types of arthritis and rheumatic diseases. For more information, visit rheumatology.org.