Part One: Understanding and Identifying Inflammation

Shelley Fritz 00:02

Welcome to part one of our Patient Audio Guide, "Fight Back Against Inflammation," produced by the nonprofit CreakyJoints and the Global Healthy Living Foundation and made possible with support from UCB. Today we are joined by Dr. Jeff Stark, rheumatologist and head of immunology medical at UCB. Dr. Stark will shed light on the pivotal role of inflammation in conditions like psoriatic arthritis and axial spondyloarthritis and why it's important to collaborate with your health care provider to identify and manage it for the sake of your overall well-being. When left unchecked, inflammation can cause added challenges for our patient community. From increased joint pain and fatigue to lost days, gaps in memory and lack of mobility, not to mention the potential for long-term damage to the tissues, nerves and joints. By working hand in hand with your health care team and embracing the insights shared here today, we can take meaningful steps to regain control over our conditions and quality of life. Together, let's face inflammation head on. In part one of this patient audio guide we'll address the essential aspects of understanding and identifying inflammation. Welcome, Dr. Stark, it's great to speak with you today about such an important topic.

Dr. Jeff Stark 01:20

Thanks, Shelley. I appreciate the invitation. It's great to be with you and also with all of your listeners.

Shelley Fritz 01:25

Can you explain inflammation in simple terms, chronic versus acute, and why it's important for people with psoriatic arthritis and axial spondyloarthritis to understand inflammation as part of their overall disease management and quality of life?

Dr. Jeff Stark 01:39

Yeah, so you asked a really great question. And I think it's important to maybe first understand that inflammation is not always bad, particularly acute inflammation. Inflammation, in short, really refers to an acceleration in the activity of our immune system. And that can actually play an important and positive role in some circumstances. If you think for example, about when you get a common cold, or some other type of infection, or perhaps when you have an injury, your immune system reacts to those things, and it helps you to defend yourself against the infection, it helps to set up the healing process after an injury. And in those settings of acute inflammation, we think of it as a normal and beneficial process. By definition, those acute inflammation episodes resolve when the trigger that causes them to begin is gone. And so with acute inflammation, the inflammation comes, it goes, it does its important job and then it dissipates. Inflammation, however, can become harmful or negative when it is chronic. And it continues long term. And in these instances, such as the inflammatory diseases that you mentioned, things like psoriatic arthritis and axial spondyloarthritis, the inflammation turns on and it's unable to turn off on its own. And in those instances, the ongoing inflammation can actually causes symptoms. Some of those symptoms for the diseases that we're talking about today may be things like joint swelling, joint pain, stiffness. For psoriatic arthritis patients, they may also include inflammation in the skin in the form

of skin psoriasis, and for axial spondyloarthritis patients, back pain and stiffness are actually quite common, as can be uveitis, or inflammation of the eye. All of these are examples of inflammation being active when it ought not be. We worry, though, in chronic inflammation, not only about the symptoms, which in and of themselves can be severe and bothersome, but also the consequences of that ongoing inflammation, which can be damage to the body. And you alluded to that as well in your introduction, if that inflammation is not turned off, it can actually damage parts of the body like the joints in an irreversible way. And certainly, that for us is a reason that we want to control inflammation and prevent it before it can lead to that irreversible damage.

Shelley Fritz 03:58

That's very helpful in understanding the difference. It's like I wish I could turn off the light switch to turn the chronic inflammation off. As someone who lives with autoimmune inflammatory arthritis, I understand the magnitude of fatigue and joint pain over time, it really starts to impact every aspect of your life. So can you describe how someone might experience inflammation in their body? And what are the common symptoms? You talked a little bit about it, but is there anything else you want to add?

Dr. Jeff Stark 04:24

Absolutely. So when we learned about inflammation in medical school, we learned that there are four cardinal signs of inflammation. And these are things that many of our listeners will recognize because many of them are things that they experience, but those four signs of inflammation are pain, swelling, redness, and warmth. And if you think about what an inflamed joint is, like you may see all four of those things happening in that joint but ultimately, the specific symptoms depend on what part of the body is involved. So, for example, for inflamed joints, we may see things like pain and swelling and stiffness. When there's inflammation in the skin, for example, with psoriasis, we can see redness, scaling of psoriatic plaques, if areas---that I know I mentioned earlier the eye----if it's an area that's involved, patients with uveitis may experience pain in their eye and sensitivity to light or changes in their ability to see. The symptoms, however, are not always isolated to a single area. And we know that in these chronic inflammatory conditions, there is some degree of inflammation that is systemic or body-wide in nature. And some of the symptoms that we see associated with systemic inflammation may be things like fatigue, or poor sleep, or even depressed mood as those components of the immune system that are driving the inflammation circulate throughout the entire body.

Shelley Fritz 05:46

Great, thank you so much for explaining that. That was very, very helpful. So, how do doctors measure inflammation?

Dr. Jeff Stark 05:52

Measuring inflammation is actually a bit of a complicated exercise, I would say. We know that there are some tools that are helpful to us in order to measure inflammation, but those tools are not always perfect. It is important I will say though, to measure inflammation because patients who have inflammatory diseases can have symptoms from those inflammatory diseases, but they can also have noninflammatory diseases. For example, if we think about a patient with psoriatic arthritis, they may have joint pain from their psoriatic arthritis, which is inflammatory, but they could have another type of arthritis like osteoarthritis, for example, which is noninflammatory. And so measuring inflammation and

being able to attribute symptoms accurately to an inflammatory or noninflammatory cause is very important because those causes would be treated differently. So, one way that doctors measure inflammation is by tracking symptoms. Certain symptoms are indicative of inflammation, for example, joint swelling, or a joint that is warm to the touch. We often ask our patients about how long they're stiff in the morning, because the longer folks are stiff when they get up out of bed, the more active their inflammation seems to be, and so tracking the way those symptoms are changing over time is one way to measure inflammation. One way that rheumatologists look for inflammation, and assess how active it is, is also by physical examination. And so many of your listeners will know that going to the rheumatologist, a standard part of that is having a joint exam. And so rheumatologist will look for joints that are tender or swollen or warm. For patients with psoriatic arthritis, they may also look at the skin to get a sense of how inflamed areas of the skin may be with psoriasis. And those are very important and very helpful ways to measure inflammation as well. But what many of us think of when we think of measuring inflammation, are laboratory studies that helped to measure inflammation, some of those may be very familiar to your listeners, because they've either talked about them with their rheumatologist, or they've seen them on their laboratory reports. These include things like sedimentation rate, and C reactive protein. And these are laboratory studies that can be elevated that can tell us when there is active inflammation and can detect that and measure it and quantify it in a way that allows us to sort of track that level of inflammation over time. You know, these laboratory tests don't always match up with what patients are experiencing, or even with the level of inflammation that rheumatologists may see when they, for example, examine a patient's joints. And I think it comes down to the fact that inflammation is very complex, and the tools that we have to measure it are somewhat rudimentary and nonspecific. As a rheumatologist myself, I have seen patients who very clearly have inflamed joints, and yet they're, sed rate and CRP are normal. I've had patients come in whose joints look great, and I don't see any inflammation at all, when I examine them, and yet their sed rate or their CRP is elevated. And I think for us, the take home point is that labs are a useful tool, but they can't be used alone. They really have to be paired with the symptoms that the patient is experiencing, what we see on physical exam, and just a knowledge of what else is going on with a patient. For example, you know, a patient with psoriatic arthritis may come in and their arthritis is great, but they are getting over the flu or they just had a cold, their sed rate may be up because their immune system is busy fighting off an infection and not because of their psoriatic arthritis. So we really have to take, I think, a holistic view of the patient, looking at other signs or symptoms of inflammation besides laboratory tests, and also what else may be going on with the patient at that point in time as we strive to interpret those laboratory values.

Shelley Fritz 09:33

Oh, wow, thank you so much for clarifying about how important it is to have the holistic view and have a conversation with the patient about how they're feeling because those blood tests don't really tell the whole story sometimes. So that's been a big question within our patient community. Thank you for answering that.

Dr. Jeff Stark 09:50 Absolutely.

Shelley Fritz 09:52

Thank you, Dr. Stark and thank you for joining us today on part one of "Fight Back Against Inflammation: A Patient's Guide." It's been a journey filled with insights and understanding. Throughout our conversation we've explored inflammation's significance, its impact on daily life and quality of life and the puzzling nature of inflammation, namely, when inflammation markers and symptoms don't quite align. We've shared valuable insights on how to have constructive conversations with your health care provider, as well as a range of therapies, lifestyle changes and exciting new developments that can help you manage inflammation more effectively. As we bring this journey to a close. Remember that with knowledge, determination, and the support of your health care team, you have the tools to take charge of your health. Make sure to listen to part two of this audio guide, "Managing and Treating Inflammation." We'll discuss strategies for effective communication with your health care providers, explore various therapeutic options and uncover the crucial role of lifestyle changes in controlling inflammation. So thank you for being here today. And please know that your well-being matters. Keep moving forward with the confidence that you can indeed fight back against inflammation and embrace a healthier, more vibrant life. This audio guide was made possible with support from UCB.

Narrator 11:11

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