Pediatric Uveitis

So you think rheumatology is all about joint pain? Think again. Rheumatologists treat a wide array of autoimmune conditions affecting nearly every part of the body- even the eyes. Uveitis is an inflammatory eye condition that can be caused by infection, underlying autoimmune diseases such as juvenile arthritis or sarcoidosis, or as an idiopathic disease. Untreated it can lead to cataracts, glaucoma and even blindness. Listen as Ashely Cooper, MD, pediatric rheumatologist, discusses childhood uveitis and how Children's Mercy Kansas City is improving care for kids with chronic uveitis.

Featured Speaker:

Ashley Cooper, MD

Ashley Cooper, MD, is a pediatric rheumatologist and Interim Division Director of Pediatric Rheumatology at Children's Mercy and Associate Professor of Pediatrics at the University of Missouri-Kansas City School of Medicine. Dr. Cooper completed medical school, residency in pediatrics and fellowship in pediatric rheumatology at the University of Texas Southwestern Medical School in Dallas, TX. She co-directs a multidisciplinary pediatric uveitis clinic at Children's Mercy with Erin Stahl, MD, Ophthalmology Section Chief.

Transcription:

Dr. Michael Smith (Host): Alright so our topic today is pediatric uveitis. My guest is Dr. Ashley Cooper. Dr. Cooper is Interim Division Director of Pediatric Rheumatology at Children's Mercy. Dr. Cooper, welcome to the show.

Dr. Ashley Cooper (Guest): Yes, thank you for having me.

Host: I want to start by mentioning something here. I think we forget sometimes as general practitioners, general pediatricians, that rheumatologists treat more than just joints, right? Can you just maybe review a little bit about the scope of the practice for a rheumatologist?

Dr. Cooper: Sure, so we certainly see arthritis as sort of our bread and butter in rheumatology, but we also take care of a lot of other autoimmune and autoinflammatory diseases that really can affect almost any part of the body. Some of those diseases are multisystem, like lupus, and some of them are conditions that we maybe help other specialties treat, like autoimmune brain diseases or autoimmune eye diseases that children require immunosuppression for.

Host: Yeah, so that brings up pediatric uveitis, right? So here's an example of the scope of what you guys actually do and what you actually treat. So tell us a little bit about uveitis.

Dr. Cooper: Yeah so uveitis is – it's really a group of conditions that cause inflammation in that really vascular middle layer of the eye called the uvea. So sometimes that can occur as an acute problem that self resolves or resolves with a short course of maybe topic steroids, but in a lot of children who have uveitis, it's a chronic disease that may be related to either an underlying autoimmune disease, like juvenile arthritis, or can occur as an idiopathic autoimmune condition where the only part of the body that's affected is the eye.

Host: So in those acute cases, as you mentioned, do you normally resolve or maybe there's some steroids being used – what is the cause in those cases?

Dr. Cooper: So there are a lot of different causes in those cases. Those are usually not the cases that I get involved in. Some of those patients are probably never referred to a rheumatologist and managed by ophthalmology, but sometimes that can be triggered by infection or there might be a genetic predisposition, so sometimes people – when people carry an HLA-B27, like we can see in other autoimmune conditions, that sets them up to have an episode or even recurrent episodes of acute uveitis that resolve after a short period of time.

Host: Yeah, so your expertise is when –

Dr. Cooper: But again, I often don't see those kids.

Host: Right, you're going to be referred to when it's chronic, right? When we're not able to treat it and now we need to really look at what's going on here, that's when someone like a Dr. Cooper would step in. So tell us a little bit about – so we're going to focus on chronic uveitis. Tell us, are there different types of chronic uveitis?

Dr. Cooper: Yep, so we classify uveitis based on a couple things. The first one would be what part of the eye is affected? Is it the front or anterior uveitis? Is it the middle, which people call intermediate uveitis, or there's a special type called pars planitis. Is it the back of the eye, posterior uveitis? Or is it the whole eye, which is called panuveitis, and then the other way we classify it is based on what's the underlying cause. So we look for infection, there are certain infections that can trigger or cause uveitis. There's a lot of autoimmune diseases including juvenile arthritis, sarcoid, IBD, and then again probably about 40% or so of the kids we treat with this, we don't identify an underlying cause. So either we can't find it or prove it, or it's truly an isolated eye disease.

Host: How many patients do you guys see over at Children's Mercy with chronic uveitis?

Dr. Cooper: So we see them in a couple different ways. There are some kids that we follow separately with ophthalmology and rheumatology. Those are mostly kids with juvenile arthritis who their arthritis is their main problem and they have mild arthritis. I don't have a good number of those – of how many those we have, but we do have a combined multidisciplinary clinic where we see the worst and most refractory cases. We have about a hundred active patients in that clinic kind of at all times. So that's a pretty descent sized cohort, and it's a unique way to see patients. There's only a handful of combined ortho/rhum uveitis clinics for children in the US.

Host: Yeah so with these kids, how do most of them present then? So we have a case of chronic uveitis, how did that initial child present to say the general pediatrician and what are some of those symptoms and some of those signs that the generalist should look for?

Dr. Cooper: So there are a couple different ways, and I think this is where it gets a little tricky. Some kids will present with obvious symptoms. So some kids will present in an acute way with a painful, red, photophobic eye that often times is initially confused for conjunctivitis and treated for that for quite

some time before they realize it's not responding the way we'd expect. Something different is going on. So those kids really should be referred to an ophthalmologist if you think a child has conjunctivitis or they have a really painful photophobic eye that's not responding as you'd expect. The hardest kids to diagnose, and this is really what we see more, a lot of kids with chronic uveitis, really don't have any symptoms until they have damage. So they have no redness, no sensitivity to light, little kids can't describe floaters or symptoms like that, so they may be walking around with inflammation in their eye for a long time until they develop something obvious like a cataract or an irregular pupil from scarring, or unfortunately until they develop decreased vision, and really at that point we sort of missed the boat, we haven't treated them at the optimal time. So kids who have idiopathic uveitis like that, where they don't have an underlying disease that's prompting us to screen them, sometimes they already have damage in their eyes by the time we diagnose them. For kids who have juvenile arthritis though we have this wonderful opportunity to know they're at risk for that happening and to screen them in a very proactive way so that we can find it before that happens.

Host: So in those patients that you are screening for various reasons, you find it, they get the diagnosis of chronic uveitis, what's the treatment plan for them?

Dr. Cooper: So usually the ophthalmologist will start first with some sort of steroids, either topical or oral steroids or sometimes even an injection of steroids into the eye depending on the type, and that's really first line therapy, just as a child to see does this resolve, is this truly going to become chronic, and if it is chronic and we're not able to get them off of steroids, which have a lot of morbidity, we end up treating these patients with immunosuppressive drugs, but that's really – in addition to helping diagnose the underlying condition, that's really where a rheumatologist can play a role in these patient's care is in helping to manage meds that we use all the time for other diseases like methotrexate or biologic drugs such as TNF inhibitors, which work really well for uveitis.

Host: And if you start treatment before there's damage, what's the outcome for these?

Dr. Cooper: So the hope is if you control the inflammation completely, then you'll prevent any of that damage from happening, and these kids are hard to treat and some of them require a lot of medications and that can be hard for families, especially if they have a child who has no symptoms in their eye and we're asking them to use a lot of strong medicines, that can be hard to swallow, so I think that's where a collaborative approach and great communication to the family really plays a great role, so we can explain to them that we're trying to prevent their child from developing blindness over time.

Host: And that's something I've always been, Dr. Cooper, very impressed with Children's Mercy. Right, you guys – many of your departments and clinics are multidisciplinary, you have a lot of different professionals involved, there's family education, and I know you guys get really close to the patients and the family and that's something I've always respected about Children's Mercy. Let's end with this Dr. Cooper, what would you like the audience to know about pediatric uveitis?

Dr. Cooper: I think my top two tips would be, if you have a child who has a red, painful eye that doesn't seem typical for conjunctivitis or something that you see frequently in your practice, please refer them to an ophthalmologist for an exam, and second if you have kids you follow in your practice that have autoimmune disease like JIA or sarcoid, lupus, be in communication with their rheumatologist about how often they need eye screening and help reinforce to families how important that is.

Host: Dr. Cooper, I want to thank you for the work that you're doing at Children's Mercy and also thank you for coming on the show today. You're listening to Pediatrics in Practice with Children's Mercy Kansas City. For more information, you can go to childrensmercy.org, that's childrensmercy.org. I'm Dr. Mike Smith, thanks for listening.