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General Surgery Overview for Pediatricians

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In this episode, Dr. Tolu Oyetunji leads a discussion focusing on a general overview of surgery practices for pediatricians.

Featured Speaker:
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Transcription:
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Dr. Rob Steele (Host): Welcome to Pediatrics in Practice, a CME podcast. I'm your host, Dr. Rob Steele, Executive Vice President and Chief Strategy and Innovation Officer at Children's Mercy, Kansas City. Before we introduce our guests, I wanted to remind you to claim your CME credits after listening to today's episode. You can do so by visiting cmkc.link/cmepodcast and click the Claim CME button.

Today, we are joined by Dr. Tolu Oyetunji for a surgery overview for pediatricians. Dr. Oyetunji is the Thomas Holder and Keith Ashcraft Endowed Chair for Pediatric Surgical Research and the Division Director of Pediatric General Surgery in the Department of Surgery at Children's Mercy, Kansas City. He's also a professor of Surgery at the University of Missouri Kansas City School of Medicine and the Program Director for the Surgical Scholars Program and the Director of Health Outcomes Research in the Department of Surgery. He is a member of multiple surgical societies and currently serves on national committees of several organizations and is an Assistant Editor for the Journal of Pediatric Surgery.

Dr. Oyetunji received his medical training at the Health Sciences in Ogun State, Nigeria, and then completed a master's in public health at the Johns Hopkins University Bloomberg School of Public Health. This was followed by a General Surgery residency at Howard University Hospital and a Pediatric Surgery fellowship at Children's Mercy. He has obtained a Master's in Business Administration from the Warwick Business School at the University of Warwick in the United Kingdom. He is an accomplished and well-published researcher. His research work focuses on surgical quality improvement, surgical innovations, healthcare disparities, and global surgical care delivery with particular interest in the dissemination of evidence-based clinical protocols. Dr. Oyetunji, thank you for joining us today.

Dr. Tolu Oyetunji: Thank you for having me and for that wonderful welcome.

Host: Well, I got to tell you, you are so busy and doing so many things. I haven't even touched on your innovation and entrepreneurial bent that you have. I don't know when you sleep, I got to be honest.

Dr. Tolu Oyetunji: When you're doing work, it's like your hobby. You got to enjoy it so you spend more time on it, I guess.

Host: Yeah, very good. Well, I'll tell you, I have had the pleasure of working with you in that sort of entrepreneurial and innovation space. Maybe we'll have some opportunities to talk a little bit about that later in the podcast. But today, we're going to talk really about Pediatric Surgery with the bent of preparation, maybe the help in diagnosis. But really, once there is a concern for a surgical concern, how does the primary care pediatrician prepare that patient and family in anticipation of that referral over to you? So, why don't we just get started on that. Maybe you could give the audience an overview of what are some of the common entities that you see that get referred into you, particularly from the primary care pediatrician side, and maybe actually also some of the things that can mimic some surgical entities that you ultimately, as you're looking into those patients, how one could try to distinguish surgical, non-surgical.

Dr. Tolu Oyetunji: Yeah. Probably one of the most common things we end up getting referred is appendicitis, and that's generally abdominal pain. So, the kid has abdominal pain and you're concerned what all the potential differentials could be. And it's not unusual for children to have abdominal pain. So, appendicitis might not be your number one thought, especially if the kids are much younger.

So, as with any parent, myself being a parent, you kind of think, "Oh, it''ll get better. It's probably just the stomach bug. But when these kids do come around it's important to ask other questions related to the onset of symptoms, how long it's been, any associated fevers, you know, just to start thinking about appendicitis and based on the location of the pain that we typically say right lower quadrant pain, it might not be there. It could be just very vague. So, asking those very particular questions and, of course, a very good exam can be very helpful to point towards appendicitis. And, of course, you might need to rule out other things based on the age of the child. Is it possibly urinary tract infection? And some of the things that will initially come to mind to make sure you rule that out for appendicitis. Or if it's a female, also gynecological conditions can mimic appendicitis.

Host: You know. I'll tell you, in my experience, appendicitis has been aptly named, it's the great imitator, right? It's because there's so many ways in which that can present. I feel like I have seen it present in a lot of different ways. I imagine you have seen virtually every way appendicitis can present. And I imagine even for the specialists in General Surgery, it can be sometimes confusing and challenging.

Dr. Tolu Oyetunji: Absolutely, it can be. And, again, I go back to when we have younger kids, they have a lot of things that you could think of and appendicitis might not be what you think. And more importantly, based on the location of the appendix, which we know is varied, it can be behind the cecum, it can be down in the pelvis, it could be more into the belly, it could be wrapped around the back, and all those things determine how the child will present. So, yes, it can be very tricky even for us that we see a whole lot of them in a year, it can be very tricky to figure out if you have appendicitis or not.

Host: So, let's pull on that string just a little bit. So, a child presents in the office or at times maybe just calls the pediatrician and says, "Hey, here's what's going on." But for the primary care pediatrician who has now, let's say, seen that child, taken a good history, done a good exam, now has a high index of suspicion of appendicitis. What advice do you have to prepare that child and family for that referral? Because presumably they're going to send that child, we'll give you a call and/or send them to the emergency department. What advice do you have for them to prepare that family?

Dr. Tolu Oyetunji: It depends on what a provider has access to. If you have easy access to ultrasound, it's very much the preferred diagnostic modality that we'd like to use. And again, if that will not delay the referral of the child, if that can be done and we have that result, it's very helpful. Because once that can show that the appendix is distended, there's stranding and some inflammation from what our colleagues in Radiology say, that is kind of like, "Okay, this kid has appendicitis," then a quicker surgical consult can happen. If, however, there's no access to that, then they need to come to an emergency room, for example, sent to the nearest emergency room where we can have pediatric specialists to re-examine that child.

And also, like I said, go ahead and get an ultrasound, which can be helpful in making the diagnosis. If the index of suspicion is very, very high, sometimes they would just call surgery and we come examine and discuss with family that this seems like it's most likely appendicitis and sometimes occasionally we might forego the ultrasound and then just go straight to surgery.

Well, because ultrasound is easy for us to obtain, almost always most of our kids that come to us have an ultrasound performed on them when they come to us. So, they have an ultrasound done at an outside facility that they just sent to us, and that's okay, too.

Host: Yeah. That's really great advice. You know, the challenge for resources, whether you're in an urban setting, which you might have more resources versus more rural, where you may not have an ultrasonographer that can do that. In, 2024 with regard to also ultrasonography and its preference as a diagnostic tool, how experienced does that ultrasonographer need to be in order to feel confident that, one, you've gotten a good look at the appendix and the other one is just you've got a good visual to help make a decision?

Dr. Tolu Oyetunji: I think they need to be very comfortable with it, especially with the size of the children that we deal with, especially if you're in a location with a lot of adults, an ultrasonographer, and that's what they've done. Some of them might be comfortable with it, but some of them might not find it easy in our smaller kids, like a five-year-old, a six-year-old. And that should be considered, you know, if they don't identify it and they get referred to us, we might sometimes repeat that, and that's the good thing about ultrasound. We're not exposing the kids to radiation. We can always repeat the ultrasound if it's inconclusive. We can sometimes have our radiologist look at it, but that's very challenging because it's easier when you do it, and it's harder to read somebody else's ultrasound. So if they're not comfortable and they express that, and it's better they just send to centers where they can do that and not delay the referral for that child.

Host: Very good. And then, once that decision is to send that child in, you know, I can remember giving the advice, you know, "Don't stop by Taco Bell on the way to the hospital right now," often that child is not feeling that great, so they're probably not going to eat anyway. But you think about being NPO and preparation potentially for surgery, I'm going to presume that that's helpful for the surgeon. And do you have any other advice?

Dr. Tolu Oyetunji: If we have a confirmed diagnosis, if we know the ultrasound definitely confirms appendicitis, if you won't delay the child's care, yes, we will say to eat nothing by mouth, but we always put a caveat to that that we don't see this as an emergency. It needs to get done, but we do not plan to do it in the middle of the night because we have enough data to show it's not helpful. The most important thing that needs to get started in a child with a confirmed diagnosis of appendicitis is the antibiotics. Once the antibiotics get started, the treatment is already started. Surgery just becomes part of that treatment, but it doesn't have to be the first treatment. Antibiotics is the very first thing that we need to start. And then, of course, say nothing by mouth, just in case that surgery can happen sooner than later.

Host: Let me pull on that string too. I think that's really important because for the primary care pediatrician, giving some expectation, because the family may be thinking, "Hey, I'm going to the hospital and going right to the OR." And what I'm hearing you say as well, that's really part of the entire process and getting whether that's IV fluids, but certainly antibiotics on board is one of the most important things. So, that advice or that anticipatory guidance that we can give to those families sounds like that would be very helpful.

Dr. Tolu Oyetunji: A hundred percent. Because we don't want our families to show up and feel like we're delaying care, which we don't do that. But we know that once the antibiotics have started, the concern is will the appendix, if it's not ruptured, then progress to getting ruptured? If we start antibiotics, there's no data to support that. Once you've started treatment, the surgery can be delayed for 12-15 hours without any additional complications. So yes, that's always helpful to let families know that you'll get done, but it may not be like right away once you get to the hospital.

Host: Yeah, very good. What about pain control? So, what expectations could families have? I imagine it may be a little different if the diagnosis is not entirely confirmed versus a clearly confirmed case of appendicitis. What expectations can families expect with regard to addressing pain in that scenario?

Dr. Tolu Oyetunji: Once they show up to us, and whether confirmed or not, we do our very best to get the pain under control, and that's something else that we know can help with your diagnosis. If it's just something else that is not appendicitis, probably pain medications, even a little bit of opioid, which we tend to try to avoid anyway, might make the child comfortable for a little bit. But after a while, the pain is going to come back because that's not the source. But once they show up to us, we get the child very comfortable, we make sure we control the pain, start antibiotics, and then of course plan for surgery.

Host: Very good. Well, let me flip to the other end. So, the child has come in and whether we're talking about appendicitis or maybe even just a simple hernia surgery or some other general surgical procedure that was done, the coordination with that family, what's the advice with regard to who should they call? I know that it's going to depend on the case individually. But for the primary care pediatrician, what typical expectation should they expect with regard to communication and how they coordinate with care with the general surgeon?

Dr. Tolu Oyetunji: Yeah, I think calling 1-800-GO-MERCY is always the first step. This point of call that I think can help, if they call us with that information and they call their nearest surgeon if they have access to it, that's very helpful because then they can guide you because if it's appendicitis, based on the symptoms you tell us, we can go straight to the emergency room and the child will get admitted that way. Or, if we have a diagnosis that is confirmed, we might be able to expedite that child's admission quicker if they can direct to surgery. If it's Umbilical hernia, for example, we can guide you to, "Oh, that's something you can see us in clinic. This is the clinic number, and we can help set up an appointment to get into surgery clinic." So, that particular single point of contact can really help guide the primary provider in which direction they need to go. And that's helpful rather than playing phone tag and figuring out who to call most times.

Host: Yeah, very good. Well, Dr. Oyetunji, I really appreciate the time that you've given us. I think you've given us some pearls of wisdom particularly while we focused a little bit on appendicitis. I think that's applicable to a number of entities in which the primary care pediatrician may be sending those patients into you or one of your colleagues. So, we really appreciate it. I have to ask, so accomplished pediatric surgeon, researcher, innovator entrepreneur, and oh, by the way, you really like to travel. So, I've heard about that, although most of your travel, I guess, has been to Europe and now you're looking to head over East, maybe to Asia. I got to ask, I mean, what gets you up in the morning? That's a lot of things that sound like a lot of fun. If you had to rank order them, where's your interest?

Dr. Tolu Oyetunji: I think there's a thread that runs through everything, and that's curiosity. I like to challenge myself to know new things, to ask questions why, and to learn about new things. So, I think that's something that gets me up in the morning, whether it's my innovation work, or my surgical career, or my research. It's just that ability to be curious every time, curious about other cultures, curious about surgery, curious about how things work. I think that's what really gets me up in the morning.

Host: Oh, that's a fantastic answer. I couldn't have said it better. Thank you again, Dr. Oyetunji, for joining us today. As a reminder, claim your CME credit for listening to today's show. Visit cmkc.link/cmepodcast and then click the Claim CME button. This has been another episode of Pediatrics in Practice, a CME podcast. I'm Dr. Rob Steele. See you next time.