

Episode 29 – Chickenpox (Varicella)

With Dr. James Wayne

Diane (00:00):

Chickenpox: the disease of yesteryear. Or is it? Find out on today's Vax Matters.

Clay (00:15):

Hello, ladies and gentlemen, and welcome to another episode of Vax Matters. Now, you knew it was coming, chickenpox is the disease of discussion for today, and we are so excited to explore its history and the vaccine developed for that illness. Today we welcome pediatrician, Dr. James Wayne of Ochsner, as we talk about chickenpox, walk you through the timeline of it, and its global impact. Dr. Wayne, how are you?

Dr. Wayne (00:42):

I'm doing well.

Clay (00:42):

Let's-

Dr. Wayne (00:42):

Doing well.

Clay (00:43):

Let's begin at the-

Dr. Wayne (00:44):

Good to be here.

Clay (00:44):

... at- at the beginning, what is chickenpox?

Dr. Wayne (00:48):

Uh, chickenpox is a viral illness. Uh, believe it or not, it is a respiratory illness primarily. It's passed on via droplets from one person to the next, uh, usually. So it can cause, uh, symptoms including fever, runny nose, believe it or not, it causes a sore throat in some, uh, patients. Um, but we know it for its viral exanthem, um, the classic description of the- the rash or viral exanthem that's associated with chickenpox is dewdrop on a rose petal.

Diane (01:22):

Oh.

Dr. Wayne (01:22):

So, you know, you have the- a- a lesion that's on a red base, and it has a little vesicle, and it sometimes will be clear or, you know, sometimes a little bit cloudy on top of that red base. Um, i- so that's the classic description of, uh, the lesions from chickenpox.

Diane (01:39):

Highly contagious, because it is airborne, correct?

Dr. Wayne (01:43):

Correct. Absolutely. It's passed on via droplets from one person to the next. It can be passed on, um, via contact with an open lesion as well. So if you have, you know, open lesions that are kinda oozing, um, you can get it from, uh, contact that way as well. But primarily, it's passed on via droplets, just like the common cold.

Diane (02:05):

This might be a stupid question, but I'm just gonna get it ou- (laughs) I'm gonna get it out there right at the top. Why in the heck is it called chickenpox when a chicken... Does a chicken have anything to do with anything, Dr. Wayne?

Dr. Wayne (02:17):

No, a chicken doesn't have anything to do-

Diane (02:18):

Okay.

Dr. Wayne (02:19):

... with it.

Diane (02:20):

(laughs)

Dr. Wayne (02:20):

Oth- other than the fact that, um, you know, I guess in some- somebody's mind back in the day, they thought that the individual little pox, um, the little bumps that it would- that it leaves, uh, were similar to a chicken after it's been plucked. So, you know how-

Diane (02:36):

Oh. Yuck.

Dr. Wayne (02:36):

... the skin is kinda bumpy?

Diane (02:39):

That's a lov-, that's a lovely analogy, huh, Clay? Wow.

Clay (02:40):

(laughs)

Dr. Wayne (02:41):

Yeah. So- so- so bump- bumpy chicken skin. (laughs)

Diane (02:44):

Uh-huh. Uh-huh.

Dr. Wayne (02:45):

So- so that's- that's- that's how- how it got its name.

Clay (02:47):

So-

Diane (02:48):

That- that pox is kind of a blister, is it not? Kind of a little blister?

Dr. Wayne (02:50):

Mm-hmm.

Diane (02:51):

Yeah, okay.

Dr. Wayne (02:51):

Correct.

Clay (02:52):

Yeah, so-

Diane (02:52):

Well, we got that cleared up right away here. (laughs)

Clay (02:54):

I'm pretty sure some of the folks listening just paused the podcast so they can finish their lunch or breakfast or whatever.

Diane (02:59):

Oh, shoot.

Clay (03:00):

And that is not a dumb question. That is actually-

Diane (03:01):

Thank you.

Clay (03:02):

... a very good question. Where did chickenpox come from?

Dr. Wayne (03:05):

Um, well, it is a- a- a viral illness. Um, I'm not sure that I can speak to when it was very first identified, um, but like the rest of the illnesses that are, um, circulating yearly illnesses within, um, the human population, chickenpox has been around for, you know, thousands of years.

Clay (03:27):

Mm-hmm.

Dr. Wayne (03:27):

It's- it's not a- it's not a new illness.

Diane (03:29):

Is there a similarity, maybe it's just because of the name, that would people- do people get chickenpox and smallpox mixed up in yo-, in their brain? Of course, tho- those of you with a medical expertise and background would not, but just for the general public?

Clay (03:44):

Yeah.

Diane (03:44):

You know, you hear pox and you think, "Oh, it's the same- one in the same thing," and they're v- they're vastly different.

Dr. Wayne (03:50):

Yeah. So, the interesting thing is that uh, smallpox, uh, yes, it's- it's dramatically different in the way it's uh, spread and the way the pox look, um, the severity of the illness. Um, you know, they are, uh... When it comes to smallpox, we have a vaccine against that, that has been highly effective. Um, we also have a vaccine against chickenpox but at this point, smallpox has been eradicated um, from the human population. Um, it exists in laboratories. Um, we're trying our best to not let, you know, those who would do people harm get their hands on smallpox-

Diane (04:31):

Mm-hmm.

Clay (04:31):

Yeah.

Dr. Wayne (04:31):

But smallpox, thanks to a- a strong vaccination effort um, that took place, you know, before most of our lifetimes, um, you know, has been eradicated. Some of us-

Diane (04:44):

Well, that's-

Dr. Wayne (04:44):

... still have a little scar on our shoulder from our smallpox vaccine.

Diane (04:47):

Mm-hmm.

Dr. Wayne (04:48):

I got my vaccine before going to Iraq back in 2004-

Diane (04:50):

Oh, gosh.

Dr. Wayne (04:52):

Um, but uh, you know, others are- are old enough to have received the s- the smallpox vaccine as children.

Diane (04:59):

Mm-hmm.

Dr. Wayne (05:00):

Um, and thanks to that vaccination effort, um, we don't have to worry about smallpox anymore.

Diane (05:04):

We love to hear the word, eradicated, Clay.

Clay (05:06):

Yeah. Yeah.

Diane (05:07):

I mean, that is the word we talk about all the vaccines and everything on this podcast, that is the prime word that we're-

Dr. Wayne (05:13):

Mm-hmm.

Diane (05:14):

... that so many health professionals are striving for.

Clay (05:17):

Yeah.

Diane (05:17):

That, m- more of these viruses and what have you, will have that word-

Clay (05:20):

Yeah.

Diane (05:20):

... and have the asterisk, eradicated.

Clay (05:22):

Well, the more that, I think, people consume information and learn about the efficacy of being vaccinated-

Diane (05:28):

Mm-hmm.

Clay (05:28):

... from the various viruses out there, the less we- we will have to deal with them. Doc, who did the distinguishing separation between smallpox and chickenpox?

Dr. Wayne (05:41):

Um, h- uh, to be honest with you, I cannot speak to that. I- I- I'm not sure, so I'd- I'd have to look that up myself.

Clay (05:50):

'Cause it's interesting 'cause you talked about the- the differences that, as Diane said, people may hear them and think that they're related in some way, but that's just really in nomenclature. They're not related at all because they-

Dr. Wayne (05:59):

No, they're not.

Clay (05:59):

... they're sep- two totally different things. Do you find now... Because we've had a lot of conversations on this podcast with various doctors about diseases that require viruses, because COVID-19 has taken so much out of the air- so much of the air out of the room for everything else, do you think we don't talk about chickenpox enough and- and promote the fact that children should be vaccinated and there are things that we should be thinking about preemptively before someone gets it?

Dr. Wayne (06:26):

So, one of the things with chickenpox is that, you know, people don't think of it as a potentially fatal disease. Um, so this is something that is a life-threatening illness, especially in those who are immunocompromised. It's a life-threatening illness, you know, and more severe illness for adults who were never exposed to chickenpox and aren't vaccinated against chickenpox. So, this is something that is life threatening.

Clay (06:51):

Mm-hmm.

Dr. Wayne (06:52):

Um, the good thing about the vaccine efforts is that because of, you know, the vaccine being out there for quite a while now, we rarely see chickenpox.

Clay (07:03):

Right.

Dr. Wayne (07:04):

In- in my career, the last time I saw chickenpox was about- about five or six years ago.

Clay (07:10):

Mm-hmm.

Dr. Wayne (07:10):

And it was in a child who was under a year of age so, at that point, had not been able to get the chickenpox vaccine yet, 'cause you have to be a year older. Um, and his grandmother developed shingles-

Diane (07:23):

Oh, gosh.

Clay (07:24):

Wow.

Dr. Wayne (07:25):

... which is a reactivation of that same virus-

Clay (07:27):

Yeah.

Diane (07:27):

Mm-hmm.

Dr. Wayne (07:27):

... that causes chickenpox. So, that child ended up contracting, you know, classic chickenpox-

Diane (07:32):

From shingles?

Dr. Wayne (07:33):

... um, because of that exposure, uh, to shingles. Yes.

Diane (07:36):

Really?

Clay (07:37):

Wow.

Diane (07:37):

That is incredible.

Dr. Wayne (07:38):

So-

Diane (07:39):

I'm sorry. Go ahead, Doctor.

Dr. Wayne (07:40):

But that's the only child that I've seen probably in the past five or six years with chickenpox because of the vaccine.

Diane (07:45):

You know, I- uh, and I think too, that so many people, in their brain, associates chickenpox with a childhood disease-

Clay (07:52):

Right.

Diane (07:53):

... that a- as Clay said, you almost- well, I- I shouldn't say, shrug it off-

Clay (07:56):

Yeah.

Diane (07:57):

... but it doesn't appear to people that this is a really serious disease, or this could be, as you said, a life-threatening disease. But that's the farthest thing from the truth. This is a very serious disease.

Dr. Wayne (08:08):

Absolutely. Absolutely. Um, so the- when it comes to young children, um, for the most part, the things that cause them to be hospitalized with chickenpox, um, dehydration. 'Cause again, it causes sore throat-

Clay (08:22):

Mm-hmm.

Dr. Wayne (08:23):

... a lot of times you have lesions within the mouth, and the children don't eat or drink very well.

Clay (08:26):

Wow.

Dr. Wayne (08:27):

So, they'll get dehydrated because of that. And then also, secondary infections. So, chickenpox can put people at increased risk for both secondary skin infections and also pneumonia as well.

Diane (08:39):

Mm-hmm.

Dr. Wayne (08:40):

So it is pot- a potentially life threatening disease-

Clay (08:42):

It's-

Dr. Wayne (08:42):

... for children and adults.

Clay (08:43):

It's a big deal. Like, listening to you talk about it, and- and again, it doesn't get discussed as much, but it's a- it's a pretty big deal. What about nutrition and hygiene? Does that have any impact on a person contracting this or being able to avoid chickenpox?

Dr. Wayne (08:59):

So the- the healthier you are when you go into, you know, fighting off a disease like chickenpox, the more well hydrated you are, the- the better your course is gonna be. So, um, I get asked all the time, are there certain types of vitamins, um, or a- a supplement that, you know, a child can take in order to help boost their immune system. I get asked that question a- a lot. Um, the short answer is no. The important thing is, you know, a proper diet, um, being well hydrated. There's not any magic medicine or tincture that's going to boost the immune system and have them be able to fight off the illness sooner. But if they're eating a diet that is- um, where they have fruit and vegetables and a lean protein source, if they're well hydrated, um, then they're- they're gonna be fine.

Diane (09:50):

But you know, that is a- a very good question to ask, almost a valid question, because parents, they're- they're trying to figure out what they can do to help their child. I know when I was a kid, and even (laughs) into my adulthood, my mom would always say, "Take your vitamins. Take your vitamins." You know, you always wanna have... Not that it's not good, but sometimes you almost want a little magic pill-

Clay (10:09):

Yeah.

Dr. Wayne (10:09):

Mm-hmm.

Diane (10:09):

... to try to help with, you know, the immune system with the childhood- to keep them- with the child rather, to keep them as healthy as possible. So, that kind of brings me to the question here, Dr. Wayne, about how common was the chickenpox prior to the vaccination? Because I know, back in the day, many years ago before the vaccination, I had chickenpox and my... I wanna- was it chickenpox or the mumps? I- I'm sorry, I get them mixed up. But, uh, I think my mom would bring my cousin and my brother into the room so they could be exposed, so they could get it over with basically.

Clay (10:44):

Yeah.

Dr. Wayne (10:44):

Yep.

Diane (10:44):

So, it was- it was pretty common, back in the day before vaccine?

Dr. Wayne (10:49):

Yeah. Before the vaccine, chickenpox was almost ubiquitous.

Diane (10:52):

Was it? Okay.

Dr. Wayne (10:52):

Meaning, like, something that everybody got as a child.

Clay (10:55):

Yeah.

Diane (10:55):

Pretty universal then, yeah.

Dr. Wayne (10:57):

Um, so I was- unfortunately, I was the one who brought it into my household-

Diane (11:00):

(laughs)

Dr. Wayne (11:01):
... when I was- uh, I was in the seventh grade.

Diane (11:04):
Oh, gosh. You were older.

Dr. Wayne (11:06):
12 years old, at-

Diane (11:06):
You were older having it.

Dr. Wayne (11:07):
... at- at McKinley Middle.

Clay (11:09):
(laughs)

Dr. Wayne (11:09):
Um, so-

Diane (11:09):
They loved you there at McKinley, huh? (laughs)

Dr. Wayne (11:14):
Yeah. Yeah. So, uh, I- I contracted it at McKinley and brought it home-

Diane (11:14):
Yeah.

Dr. Wayne (11:15):
... to my younger sister unfortunately.

Diane (11:18):
Yeah.

Dr. Wayne (11:18):
Um, but yeah. It- it was one of those things that was ubiquitous and, you know, people would have parties, like you're talking about, where they would gather the children who hadn't been exposed-

Diane (11:26):
Yes. Yeah.

Dr. Wayne (11:27):

... so they could go ahead and get exposed-

Diane (11:28):

And get it over with, basically. Yeah.

Dr. Wayne (11:30):

And- and- and the- and the fear was that, you know, if it- they weren't exposed to it as a child, that they could potentially have a more severe illness as an adult. Um, so-

Clay (11:41):

That's kind of macabre, but it- but it- it is the way it was thought about back then.

Diane (11:44):

Mm-hmm. Yeah.

Clay (11:44):

Go on and get it over with now 'cause you're more likely to survive it and be able to get through it, than grabbing it in- in adulthood.

Diane (11:51):

It was almost a rite of childhood, almost.

Clay (11:53):

Yeah.

Diane (11:53):

Yeah.

Clay (11:53):

So, you know, being a pediatrician, I'm pretty sure you are often having to dispel wrong information about things like chickenpox or the vaccine- a vaccine that you should get for it. Can you talk about that a little bit?

Dr. Wayne (12:06):

Um, I'm asked very frequently about the safety and equ- and efficacy of these vaccines.

Clay (12:14):

Yeah.

Dr. Wayne (12:14):

Um, and when it comes to a vaccine like the chickenpox vaccine, um, when it comes to the- the safety and efficacy, it's- it's been proven-

Clay (12:24):

Mm-hmm.

Dr. Wayne (12:25):

... there is a chance that you can have a- a mild... Uh, I h- I have had some patients that have had mild, uh, cases of chickenpox after getting the vaccine. So, one or two bumps and just kind of malaise.

Diane (12:39):

Mm-hmm.

Dr. Wayne (12:39):

But not full-blown illness after getting the vaccine. So, people worry about that because, you know, you're giving a live virus vaccine. Th- th- this vaccine is actually a live virus vaccine. It's weakened to the point to where it makes the body, uh, more able to fight it off quickly, but it is a live vaccine and people worry about that. Um, but it is safe and effective.

Dr. Wayne (13:03):

Um, a lot of people ask me about preservatives in vaccines. Um, th- especially live virus vaccines like measles, mumps, and rubella and the chickenpox vaccine, they're concerned about mercury and other heavy metals uh, and toxins within vaccines. Um, and there is no more mercury containing preservatives in vaccines for children. So, all of the thimerosal has been removed from vaccines for children, we don't have to worry about that. Um, you know, there's still this um, unfortunately, lingering effects from Dr. Wake- Wakefield um, and the false information he put out-

Diane (13:43):

Mm-hmm.

Dr. Wayne (13:43):

... about the measles, mumps and rub- and rubella vaccine.

Clay (13:46):

Yeah.

Dr. Wayne (13:47):

So, we're still fighting against that every day. Um, but at the same time, you know, um, open and willing to discuss these things and try to reassure parents about the safety and efficacy of the vaccines.

Diane (14:00):

And the conversations that you have with parents, you're- they're just trying to do the best for their family-

Clay (14:04):

Right.

Diane (14:05):

... and for their child. And how wonderful, Dr. Wayne, that you can sit down with parents and tell them, "These are the facts. You're hearing it from me-

Clay (14:13):

Mm-hmm. Yeah.

Diane (14:14):

"... I- I know what I'm talking- I know what I've seen, I know what to do. And please let me do the best I can for your children."

Clay (14:18):

Right.

Diane (14:19):

You know, it- it- it's interesting too, that this- the vaccine, it was released, I believe in the mid-1990s, the chickenpox-

Dr. Wayne (14:27):

Mm-hmm. Yes.

Diane (14:27):

Why- you know, for those of us who lived way before (laughs) the mid-1990s, why did it take so long for a vaccine to be developed? Or what- was there something, what- what was- I- I don't know. It just seemed like it would have been-

Clay (14:40):

Sooner.

Diane (14:41):

... since it was a childhood, yeah, illness, that it would have been before the 1990s.

Dr. Wayne (14:46):

Um, to be honest with you, uh, I- I'm not sure exactly why the vaccine, you know, took a little bit longer to develop than you would expect. Um, you know, especially considering that the smallpox vaccine and how it was developed um, you know, yeah, it happened almost, uh... What's the word I'm looking for? Serendipitously?

Clay (15:09):

Yeah, yeah.

Diane (15:09):

True. Yeah.

Clay (15:09):

Yeah.

Dr. Wayne (15:09):

Um, so the- the smallpox vaccine and how it was developed was because, uh, they noticed that certain groups of people were immune to smallpox, they were less likely to get smallpox. When it was ravaging communities, um, those that were working closely with cows um, uh, primarily like milk maids-

Clay (15:34):

Mm-hmm.

Dr. Wayne (15:34):

... um, were immune to smallpox. So, that's where the- the saying, you know, "Fair as a milkmaid's skin," comes from.

Diane (15:42):

Hmm. Oh, okay. Yeah.

Dr. Wayne (15:43):

It's that they- they weren't susceptible to smallpox. It was because cows would get, um, a virus that was very similar to smallpox on their udders, they'd get cowpox.

Clay (15:55):

Wow.

Dr. Wayne (15:55):

And these ladies, from milking the cows, actually had these cowpox lesions they would get, recover from, and you know, not have any ill effects from. And it was similar enough to smallpox, that it vaccinated again- them and protected them against smallpox.

Diane (16:13):

Oh, my gosh.

Clay (16:13):

Nice.

Diane (16:13):

I don't think we've ever had that explained-

Clay (16:15):

That's fascinating. (laughs)

Diane (16:15):

Thank you. No, uh-huh.

Clay (16:15):
That is fascinating.

Dr. Wayne (16:18):
So- so, that's-

Diane (16:18):
Yeah.

Dr. Wayne (16:18):
... that's where the initial research, um, into smallpox vaccine came from, from that particular coincidence that was identified.

Diane (16:27):
Wow. What a coincidence, huh?

Clay (16:29):
[inaudible 00:16:30].

Diane (16:33):
But at least they, uh, recognized.

Clay (16:33):
Right.

Diane (16:33):
You know?

Clay (16:33):
Right.

Dr. Wayne (16:33):
Yeah. So- but a- as far as why it took until the- the 90s for a vaccine for chickenpox to be developed and- and FDA approved, I- I- I can't speak to that.

Diane (16:44):
Mm-hmm.

Dr. Wayne (16:44):
I'm not sure.

Clay (16:46):
You know, for people who either don't have kids or- or don't know or have forgotten, when should someone get the chickenpox vaccine?

Dr. Wayne (16:54):

So, we first offer it at the 12-month well visit. So, it is approved for children, 12 months and up. Um, for those who are uh, traveling uh, internationally, um, they- we can give it uh, to children younger than 12 months, but that doesn't count towards their- their vaccine series. They still will need another, uh, vaccine after 12 months. And then typically the next booster that we do is at four years and up, so prior to them starting school.

Diane (17:26):

So, how often do you need a vaccine booster? Is that just for- uh, for the chickenpox, is it just for the youngsters, it's not for adults who have been through-

Dr. Wayne (17:35):

Yeah.

Diane (17:36):

... the series or that have had chickenpox?

Dr. Wayne (17:39):

So, they're- it's... The chickenpox vaccine is for uh, children-

Diane (17:45):

Mm-hmm.

Dr. Wayne (17:46):

Um, uh, it can be given to adults but there's actually a specific vaccine directed towards adults now, um, to help decrease their risk of shingles.

Diane (17:56):

Right. Okay.

Dr. Wayne (17:57):

So, there's a shingles vaccine that is, you know, similar to getting a chicks- chickenpox vaccine, but directed towards adults. Um, and it's to help decrease their risk of shingles later on. Um, a little bit outside of my purview, my- my oldest patients these days are 19 years old.

Diane (18:14):

(laughing)

Clay (18:14):

(laughing)

Dr. Wayne (18:14):

(laughing)

Diane (18:15):

I think most of us in this room are older than 19, I'm thinking.

Clay (18:19):

Yeah, that's right. That's right.

Diane (18:19):

I'm thinking.

Dr. Wayne (18:19):

(laughs)

Clay (18:19):

That's right, that's right.

Diane (18:20):

But again, our- our- our listeners, they need- they need to know this because it's-

Clay (18:23):

Right.

Diane (18:23):

... very critical for them to know what... Yeah, because Doctor, we've said this on- on our podcast before, Clay and I have said, sometimes we don't know what questions we need to ask.

Clay (18:33):

Right.

Diane (18:34):

And that's why, you know, sometimes you get in the doctor's office and you're a little bit nervous 'cause you're thinking, "Oh, I'm taking the doctor's time. I don't want to take too much of his time." You try to write down the questions, you- and you try to understand, but it's kind of a mental block too, when you're trying to assimilate all the answers the doctor gives to you. That, you want to make the- the- you know, say the right question, u- understand the right answer, and then proceed for your family.

Clay (18:56):

Yeah.

Dr. Wayne (18:56):

Mm-hmm.

Clay (18:59):

You know, you referenced earlier, the story about one of your patients getting chickenpox after an encounter with his grandm- his or her grandmother. And so, we've established that there is a relationship between shingles and chickenpox, can you talk a little bit more about that?

Dr. Wayne (19:14):

Yes. So, um, shingles is actually a reactivation of the chickenpox virus within a certain part of the skin on the body.

Clay (19:27):

Okay.

Dr. Wayne (19:27):

Um, and so, once we're exposed to chickenpox, the virus never really leaves our body completely.

Diane (19:37):

It never does. The virus is always-

Dr. Wayne (19:39):

It never does.

Diane (19:39):

Okay. Okay.

Dr. Wayne (19:40):

The virus is always there, um, and usually dormant and living within um, a certain type of nerve cell near the spine. So, it never goes away completely.

Diane (19:53):

Mm-hmm.

Dr. Wayne (19:54):

Um, and then there's a- always a possibility that that dormant virus could reactivate, and times when it tends to reactivate are times of stress. So if we're under um, you know, emotional or physical stress, it makes it more likely to reactivate. Times when our body is immunocompromised. So if we are taking steroids or any other type of medicine that suppresses our immune system, that can put us at increased risk for having uh, the virus to reactivate. And when it does, it comes out in one specific dermatome. And by that, I mean a certain area of the skin that's innervated by one nerve bundle.

Diane (20:38):

Mm-hmm.

Dr. Wayne (20:38):

So when you get shingles, it actually will come out in a band, um, that goes across one s- specific area that is innervated by one little nerve bundle.

Diane (20:49):

And once you are- once, unfortunately, you are diagnosed or you have shingles, what does one do? Can you speak on that, Doctor? I don't know if you-

Dr. Wayne (20:58):

Mm-hmm.

Diane (20:58):

... feel comfortable, but what does one do once you do get the shingles?

Dr. Wayne (21:03):

So, there are medicines that are antiviral medicines. Um, the same types of medicines that are used for like, herpes, when you have herpes simplex virus-

Diane (21:12):

Mm-hmm.

Dr. Wayne (21:13):

... it causes fever blisters or genital herpes as well. Um, because the- those illnesses uh, are- are related, they're- they're- they're closely related in how they uh, act in the body, the medicines that we use for, um, herpes can actually be used to shorten the duration of the illness for shingles as well. So, medicines like acyclovir and valacyclovir can be used when you first feel the tingle uh, of shingles getting ready to come on. You can take a medicine like that to, hopefully, help shorten the duration-

Diane (21:50):

Mm-hmm.

Dr. Wayne (21:50):

... of the illness.

Diane (21:51):

What is the typical duration?

Dr. Wayne (21:53):

Um, wh- um, it- it varies from person to person.

Diane (21:56):

Oh, okay.

Dr. Wayne (21:56):

Like I said, if- if you are immunocompromised, if your body is- you're having problems fighting off illnesses for- for whatever reason, you know, shingles can last for weeks.

Diane (22:06):

Oh, gosh.

Dr. Wayne (22:07):

For most people, you know, it's- uh, it's like a 7-to-10-day thing, but it can last longer than that.

Diane (22:14):

That is the more typical lifespan, so to speak of- of that.

Dr. Wayne (22:18):

Right.

Diane (22:18):

All I know is I've never had them, never wanna get them because I've heard that they're just horribly, horribly painful.

Clay (22:24):

Yeah.

Dr. Wayne (22:24):

Mm-hmm.

Clay (22:25):

You know, you referenced earlier, Doc, about the impact of stress or a suppressed immune system, and I think it cannot be... We cannot over-express the need to think about how stress impacts the body and the nervous system and the immune system. Could you lean into that a little bit? Because I think, right now, this is a hyper stressed uh, environment no matter where you are, and I think it's- people don't often realize how detrimental it is to their personal health.

Dr. Wayne (22:54):

Yeah. I- I think we've all experienced those times where we've been underneath, you know, a- a increased amount of stress, um, and it just always seems like it's at that time where we get a cold-

Clay (23:07):

Mm-hmm.

Dr. Wayne (23:07):

... where we, you know, get a stomach bug-

Clay (23:10):

Right.

Dr. Wayne (23:10):

... where all of a sudden, you know, we're- we're having these headaches that just won't go away. Um, so stress um, in- in its various forms, changes uh, the- the way the body is kind of prepared for um, responding to illness. So, at the- the same time, you know, our bodies are trying to help deal with those stressors, it- we're having increased inflammation in different parts of our body as well. Um, and there are hormones that can help when our body is dealing with inflammation and, you

know, other types of chemicals that are released in our body under stress that are of detriment to fighting off ill- illnesses and inflammation.

Dr. Wayne (23:57):

So, whenever we are under stress, it can actually change um, the way these hormones are being regulated in our body and can put us at increased risk for illness. Um, so- and in this particular situation, it's an illness that is already there-

Clay (24:16):

Right.

Dr. Wayne (24:16):

... suppressed within our body, but then when those- um, when that regulation kind of goes away, it puts us at increased risk for getting this illness, getting shingles.

Diane (24:27):

And that was an excellent explanation too, Clay-

Clay (24:29):

Yep.

Diane (24:29):

... because we don't realize until it's almost too late, about stress, and how it is going to negatively impact us. And you think, "Okay, okay. I- I don't wanna have any stress." Then you put more stress on your body-

Clay (24:41):

(laughs)

Diane (24:41):

... you- you try... You know, then you're just on the- the hamster wheel and it just- it gets a little wearisome when we're trying to take care of ourselves. And sometimes-

Dr. Wayne (24:49):

Yeah.

Diane (24:49):

... it just doesn't happen that way.

Clay (24:51):

Yeah, we f-

Dr. Wayne (24:51):

And- and rest-

Diane (24:52):

Yes.

Dr. Wayne (24:53):

Getting appropriate rest-

Diane (24:54):

Mm-hmm.

Dr. Wayne (24:54):

... is of extreme importance. So, one of the other stressors that we can- you know, we heap upon ourselves is lack of sleep.

Clay (25:02):

Yeah.

Dr. Wayne (25:03):

Um, sometimes we have control over it, sometimes we don't have control over it. But when we do, um, and can get adequate rest, it's important for us to do that.

Clay (25:14):

I love it. Uh, you know, we've talked on this podcast before about what vaccines are and how sometimes they could replicate what viruses do, so I'll ask this question. If you get the chickenpox vaccine, could it give you shingles?

Dr. Wayne (25:28):

Believe it or not, yes. It- it is possible for you to, later in life... Now- now, not- you're not gonna get it, typically, as a child-

Clay (25:37):

Right.

Dr. Wayne (25:37):

... unless there's o- other ill- illnesses going on, you know, things that make you im- immunocompromised, like we just talked about. But can someone who has the chickenpox vaccine as a child, later in life, get shingles? The short answer to that is yes.

Clay (25:52):

Wow.

Diane (25:52):

Really?

Dr. Wayne (25:53):

The chickenpox virus- uh, the vaccine is a live virus vaccine. It's weakened form of the virus, it makes it easier for the body to fight off, but it goes dormant, um, lives in those nerve cells the same way, and can become reactivated.

Diane (26:08):

So, it's-

Dr. Wayne (26:09):

So, it is possible. And that's why that adult shingles vaccine, um-

Diane (26:13):

Mm-hmm.

Dr. Wayne (26:13):

... is- is important.

Diane (26:14):

It's probably unusual, or rather rare, for it to occur, but it can occur.

Dr. Wayne (26:21):

Correct. Correct.

Diane (26:22):

Do you th-

Dr. Wayne (26:24):

So in- at- at this point, in the- the- the life of this vaccine and how long we've been using it for the past, you know, 35 years or so, um, can we uh, say for sure that when our children that got it, when they were- uh, when- when they were a one year old back in the mid-90s, um, could they potentially end up with shingles w- as a 70 year old? Um, it is possible, um, because it is a live virus vaccine. The uh, important thing though, is that we do have a vaccine, you know, essentially a booster, to help to decrease the risk of that happening later on.

Diane (27:04):

So, let me ask you this, Doctor.

Dr. Wayne (27:05):

Mm-hmm.

Diane (27:05):

Do you ever think that the possibility might be there that chickenpox will go the same route as smallpox? And what I mean by that is that we will eradicate it, maybe not in my lifetime, but possibly your lifetime?

Dr. Wayne (27:22):

Is it possible? Yes.

Diane (27:25):

Is it probable?

Dr. Wayne (27:26):

It is- it is possible. Is it probable?

Diane (27:28):

Yeah.

Dr. Wayne (27:28):

No.

Diane (27:29):

Okay. Oh.

Dr. Wayne (27:30):

And, I guess... And this is just- this is just me speaking, this is... You know, please don't take this a, you know, hard and fast science but this is just my opinion. Um, when it comes to illnesses like chickenpox, one of the things that you mentioned earlier um, uh, is one of the things that keeps it alive, and that's the fact that for the vast majority of people it is not a life-threatening illness, and not a severely disfiguring illness. Um, the thing that smallpox had going for it, as far as, you know, being a target for eradication, smallpox was disfiguring and life threatening. People died from smallpox. And those who didn't, who- who contracted it, it was permanently disfiguring.

Diane (28:18):

Mm-hmm.

Dr. Wayne (28:19):

That is- that is the recipe for- for an illness that is prime to be eradicated with a vaccine.

Diane (28:28):

Absolutely. Absolutely.

Dr. Wayne (28:29):

And- and the ma- and the main reason why is because people fear that illness.

Diane (28:34):

Mm-hmm.

Dr. Wayne (28:37):

And the- the- the issue with the anti-vax movement, um, and I'll get on my soapbox for a little bit, the issue with it is that they fear vaccines. Regardless of how well studied they are, regardless of how well we've proven the safety and efficacy of these vaccines, they still fear these vaccines more than

they f- fear these life-threatening illnesses. Because they've never seen somebody who has contracted polio, they don't fear polio. But we know that this is a life-threatening illness that can cause paralysis, can cause death. Um, you know, w- w- these days, we don't often see- every once in a while, we'll see somebody who had childhood polio but it's- it's very rare.

Dr. Wayne (29:28):

Um, so because it's not there in your face, it's easier for people to say, "Well, I'm not afraid of this because it's not gonna come knocking at my door." Um, but the polio vaccine was effective in the United States because people feared it. They saw neighbors, you know, the children of neighbors hospitalized, people dying of this illness. Um, so in those situations, um, a safe and effective vaccine was a lot easier to- to- to use, a lot easier to convince people that this was important.

Dr. Wayne (30:04):

Um, I think chickenpox is one of those things that, because it's less likely to be life threatening, um, that it is not really prime for eradication. Um-

Diane (30:17):

And it's something that you hear about all of your life, as we, you know, adults-

Dr. Wayne (30:21):

Mm-hmm.

Diane (30:21):

You've always heard about, "Oh, it's just- it's just-" not just, but "It's chickenpox."

Dr. Wayne (30:24):

Mm-hmm.

Diane (30:25):

And it just seemed like it was so common.

Dr. Wayne (30:27):

Right.

Diane (30:27):

And some of the other things, you know, like you said, that people would think, "Oh, you're just exaggerating."

Clay (30:32):

Right.

Diane (30:32):

"It wasn't that bad. That- that virus wasn't that bad." Or- or whatever virus you're talking about, not just, you know, chickenpox. But I- I think you're just so, you know, spot on there, Doctor, saying that because people didn't visually see it-

Clay (30:44):

Right.

Diane (30:44):

... you know, the- th- the polio or the smallpax- smallpox rather, the disfigurement.

Clay (30:49):

Mm-hmm.

Diane (30:49):

It's like, almost shrugging your shoulders, you know, "It's not gonna happen to me."

Clay (30:52):

Mm-hmm. Yeah.

Diane (30:53):

"Not gonna happen to anybody I love."

Clay (30:54):

Yeah. Well, that's what I meant earlier-

Diane (30:54):

Mm-hmm.

Dr. Wayne (30:54):

Yeah.

Clay (30:55):

... when I was asking about chickenpox now, is that you- you don't see it often-

Diane (30:59):

Yeah.

Clay (30:59):

... and so, it's not something that's ri... But you know, COVID-19 was so jarring to us because of the speed at which it took people out.

Diane (31:07):

Mm-hmm.

Dr. Wayne (31:07):

Mm-hmm.

Clay (31:08):

And so, it- it really made people want to get vaccinated. And a lot of minds got changed, either by watching someone they cared about uh, contract the coronavirus or having gotten it themselves and then it's like, "Okay. Yeah, let me go-"

Diane (31:19):

It's a new ball game. It's a new ball game.

Dr. Wayne (31:19):

Mm-hmm.

Clay (31:21):

It's- it's a new ball game when you've experienced it yourself.

Diane (31:23):

Yeah.

Clay (31:23):

Is there anything about chickenpox and the vaccine that we may have missed today? That- that, some information that you would like to get out?

Dr. Wayne (31:32):

Um, the- the- the main thing that I would like to say, that it's a- is that it's a safe and effective vaccine.

Clay (31:38):

Mm-hmm.

Dr. Wayne (31:39):

Um, you know, it's nothing that the parents need to be fearful about giving to their child. Um, the vaccine does not contain thimerosal or any other heavy metals that could be damaging to a child's neurologic system. People worry about, you know, vaccines effecting a child's development.

Clay (31:57):

Sure.

Dr. Wayne (31:58):

Um, and it's important for th- them to understand that it's safe and effective. Um, so that- that's the main thing that I would like to get across.

Diane (32:06):

And to feel free to talk to your pediatrician and to ask as many questions as you feel comfortable, and just to feel confident in the pediatrician's ability to help you and your children.

Dr. Wayne (32:16):

Mm-hmm. Yeah.

Diane (32:18):

Dr. James Wayne, you have been amazing. Thank you. I think a lot of us thought we knew about chickenpox but there-

Clay (32:24):

Right.

Diane (32:24):

We just need- we needed a refresher, we needed to find out more about this. And I know our listeners are gonna be very appreciative of your expertise and everything that you did for us today. So Dr. James Wayne, thank you again for being with us.

Dr. Wayne (32:37):

No, thank you. And I- I- I need to do some research and find out a little bit more about the history of the- the vaccine itself, um, you know, and- and its development. So, I- I definitely will do my homework-

Clay (32:51):

(laughs) Well-

Dr. Wayne (32:51):

... and make sure to have those facts available as well.

Clay (32:52):

Well- well look, the more important thing is if someone catches it today-

Diane (32:56):

Yeah.

Clay (32:56):

... or- or you can help them prevent it today. So, uh-

Dr. Wayne (32:58):

Absolutely.

Diane (32:59):

Yeah.

Clay (32:59):

... th- the- the other side of that is great but being able to do it right now is probably more important.

Diane (33:03):

That's the bottom line too.

Clay (33:04):

Yep.

Diane (33:04):

Fabulous job. Thank you so much, Dr. Wayne, and such an eye-opening episode. Thank you to all of our listeners. You took the time to listen to this today and we so appreciate it. We will see you next time on Vax Matters.