Hi, I'm Kathryn Guthrie.

I'm a third year pediatric resident physician

at the University of South Florida.

And thank you for having me here today to

talk with you about pediatric skin problems them.

And we'll go ahead and get started.

So first we'll start with the skin.

And this is just a very basic review of some

anatomy so that you kind of know about the lesions

we're talking about as we talk about them.

There are three layers to the skin.

The most deep, the furthest inside of

the body is the subcutaneous tissue.

And this part of the skin contains fat tissue, the

blood vessels, nerves, lymph vessels, and it acts as insulation

to keep heat inside the body as well as protecting

it from traumatic injury because it's thicker.

The middle layer is called the dermis,

and it contains sweat glands, hair follicles,

blood vessels, nerves, and immune cells.

So the immune cells live in there to help

protect the body from bacterial and virus invaders.

And then the most outside the part

that you can see actually contains many

different layers, and it's called epidermis, and

it is continuously replicating and slopping off.

At the top, the cells are moving

from the inside out and slapping off.

And this contains the melanin cells,

which produce the skin color.

And again, there are immune cells in that layer.

So here's a picture.

You'll see at the very bottom of

the picture is the subcutaneous tissue, which

has blood vessels, fat, connected tissue.

And then above that is the dermis

with the sweat glands, the hair follicles.

And then above that, further, is the epidermis.

So we'll start with some skin lesions.

When we are talking about skin lesions, we

have to have a way of speaking about

them to communicate with one another.

And this helps us to know

which process we're talking about.

So we'll start first with a macule in the patch.

These are both flat lesions,

and they're differentiated by size.

So a macule is less than zero 5.

Patch is greater than zero 5.

You'll see right below the words

there diagram a picture of that.

And then to the right of the slide is

an actual example of skin with both a macule

on the left and a patch on the right.

Next you have lesions that are

more elevated from the skin.

So a papule is elevated.

It's kind of an elevated macule if you want to think

about it like that, because it's also less than zero 5.

Then a plaque is an elevated homogeneous lesion

that is similar to a patch but just

a little bit elevated off the skin.

And again, it's greater than zero 5.

Nodule is a bit larger and deeper.

So it goes deeper than the epidermis

into the dermis or subcutaneous tissue, and

it's also greater than zero 5.

Then a tumor is a large nodule.

And again, at the bottom, you'll see some examples

of those lesions and kind of the different layers

of the skin and how they might look.

The next group are vesicle, which is a fluid

filled lesion that's less than zero 5 CM.

So that's kind of like the Papua

or the macule, but filled with fluid.

The bulla is a larger vesicle, which is

fluid filled and greater than zero 5.

Then a puffy is similar to those, but filled with pus.

And below you'll see examples of real skin lesions.

So you have vesicle and you see many

of them collected together in a group.

In the middle is a pustule, which is pus filled,

and then the bullet is a bigger vesicle and you

can have a collection of those as well.

A wheel is otherwise known as a hive

and it is sort of a regular.

It doesn't have good borders.

It's in the superficial part of the

skin that epidermis very top layer part

and it typically looks red and inflamed.

All right, so our first topic is scabies.

And I think this is one of the things that

was most requested as far as this topic goes.

And scabies is caused by a mite and it's

very small and it actually tunnels into the top

layer of the skin and forms a burrow.

And the mite then lays her eggs in the

burrow and in about two weeks the eggs will

hatch and you'll have little baby mites.

One of the ways that we

diagnose scabies is by clinical exam.

And so it's important to know

where the lesions typically occur.

So for older children and adults, the scabies

might prefer areas that do not have the

sebaceous lands and those are sweat glands.

And so those locations are the finger and toe webs,

the area between the finger and toes, the armpits and

the area between in the arm and wrist flexors or

the part that bends on the inside.

You also have the belt line, the nipple area,

the genotype area, and the lower buttocks, kind of

where that fold is underneath the butt.

And the smaller kids, it's more difficult because

they don't have as many sweat glands.

And so the lesions really can be anywhere, but

most commonly it's the palms or the soles, the

head, trunk and face or the extremities.

So really anywhere.

So again, it's a clinical diagnosis.

And so we look for location,

but we also look for itching.

And this is severe itching that is out

of proportion to what the skin looks like.

The lesions may not be very prominent,

but the itching is out of control.

And the reason that the itching is so severe is

that the body reacts to those proteins of the mite

and it kind of has an immune response to it.

And so the itching doesn't actually occur when the mite

gets on the body and starts burrowing, but instead when

the eggs hatch and the body has time to react.

This will occur four to six

weeks after the initial infestation.

And the lesion if you recall, the kind of

lesions we were just talking about at the beginning

of the slideshow are typically papules, which are those

small elevated lesions, vesicles, which are the fluid filled

lesions, or pustules, which are the puffs filled lesions

and they're all the smaller ones, the less than

zero five centimeter.

And because it's such an itchy rash, it is

often associated with excoriations, which are scratches or an

exhibitus or kind of dry thickened like rash.

And then oftentimes you can also

see the burrows in the skin.

And so if you look at the picture at the finger web

you'll see some red papules and you may see some furrows.

But from my distance currently I don't see any.

So really what you're seeing are the red papules.

And here's a nice diagram of what we

talked about with the mite actually burrowing into

the top layer of the skin.

And again, diagnosis is by clinical exam and history.

You can confirm the diagnosis by scraping the

skin but it's very low yield and it's

such a classic clinical presentation that is better

and most people just treat it.

So it's important to treat the person

and the treatment is Permethrin 5% cream.

You put it on typically at night and leave

it on for 12 hours and then you repeat

it in one week if you see new lesions.

Now remember, the itching is a reaction

to the actual protein of the mite.

So the itching may persist until

all the proteins are gone.

So itching is not an indication for retreatment.

But instead if you see new lesions or skin

abnormalities appear and it's important to treat all caregivers.

So anyone that lives in the house with

a patient who has scabies, you have to

treat because it's just so contagious.

And then it's also important to treat the itching

because like we said, it's a severe type of

itching and can cause scratches and thickening the skin

and so you want to try to prevent that.

It's also important to treat the environment.

So you're going to wash all linens, towels, clothes in

hot water and then machine dry them in hot heat

and then anything that you can't wash, like teddy bears

or quilts or anything that is too large to go

into a washing machine, you can put into an airtight

bag and leave it there for one week.

Again, complications include infection of the skin because when

you're itching, you're breaking the skin barrier and allowing

bacteria to get into that layer and so you

want to prevent itching and keep the skin as

clean and dry as you can.

And then again, an exhibitus or thicken type rash

can occur and you can also have kind of

a reaction from the actual permethrin treatment as well.

Transmission is from direct

contact with household members.

So it's not going to be if your child went to

play to a play date with a child for an afternoon,

that's not a likely cause of transmission in adults.

It can be sexually transmitted and it does

infest linens and clothing and can survive for

up to 36 hours off the host.

So it's important to treat that environment and it's

important to know that it's not spread from pets.

Something that I want to talk about with each type

of disease is when can the child return to school?

This is the question we get often.

And the patient can return to

school one day after treatment.

So you'll treat at night, they'll wash it off

in the morning, stay at home that day, and

then go to school the next day.

And here are some other examples.

Here you can see the furrows a

little bit better on the picture.

On the right you see the arrows pointing those out.

And then on the left you see some

vesicles, those fluid filled lesions, as well as

some scabbing and excoriation or scratching.

All right, the next topic is not an

infection, but it's something that we see really

commonly in kids and it's atopic dermatitis.

It's also known as eczema. And it's one of the

most common childhood skin conditions.

It's a chronic inflammatory skin condition and

it's really strongly related to allergy.

It's part of the atopic triad, which

consists of asthma, allergic rhinitis or the

seasonal allergy, nose and eczema.

And it can also be related to food allergies.

It has a strong genetic and environmental component.

So firstdegree, relatives of people with these

three atopic triad type diseases are at

a higher risk of having eczema.

Again, it's chronic and it can reoccur frequently.

And triggers are important to identify

to minimize the amount of relapse.

So triggers can include food, environmental

allergies, infection, temperature changes, lack of

humidity, irritants or scratching in itself.

And we have some picture.

So the acute or short term skin lesion is red plaque.

The plaque is the larger homogeneously raised

lesion and it has poorly defined borders.

And this will be important to differentiate

it from something we talk about later.

And because it's a condition of the top layer of

skin, you'll see that it has kind of thickening of

all those layers of the top layer of the skin.

And so in the bottom left picture, you see the redness.

You can kind of see that it's thicker, the

borders are irregular, and it's in a typical place

on the baby, which is the face.

And again, in the top right picture, it's in

the flexure of the knees and it's red raised.

And then some good examples there

on the bottom right as well.

Complications include scratches.

So again, that puts you at risk for super infection.

And infection can occur with viruses or bacteria.

And the most common virus infection we

see with eczema is eczema herpeticum, which

is an infection with herpes.

And this can be a lifethreatening problem.

So again, it's important to control the

itch and the amount of itching and

scratching to help prevent these super infections.

And then you can also have scabbing, which can take

time to heal when the lesion has been there for

a longer period of time and poorly controlled, it can

cause darkening of the skin or lightening of the skin,

which you can see in the bottom two pictures.

And it can also cause a thick, hard appearance of

the skin, which you can see in the top right.

Treatment, like we said before,

is avoidance of triggers.

And you may need allergy testing to do this.

And depending on where the child's skin lesions are,

the physician will often do blood testing because skin

testing can be difficult if the eczema lesions are

covering a large portion of the skin.

It's important to treat the acutely inflamed lesions.

So the ones that are really red and inflamed

and raw with a topical anti inflammatory like a

steroid to cool down that inflammatory response, and then

super important especially to prevent it from progressing to

those worse lesions, is frequent use of thick ointment

type emolions or moisturizers.

And then again, just like scavenge, we have to

control the itch and that can be with antihistamine.

Second line treatments for kids who

the eliminating triggers and the moisturizers

and itch control aren't working.

You can use UV phototherapy or systemic

immunosuppressants and that gets into a much

more specialized type of treatment.

Our next solution is cepheric dermatitis.

A lot of people know this as

cradle cap when it's on the scalp.

And again, it's a chronic inflammatory skin condition.

And our picture here on the right shows

us the areas that it is most common.

We have a scalp, the eyebrows, the base of

the eyelashes, the nasal labial fold, which is the

area between the nose and the mouth, the external

ear canal or the inside of the ear.

Hear the area behind the ear, and then the

armpits, the groin, the area in front of the

elbow and the area behind the knee.

Genetics and environmental factors are

important to this as well.

And in infants it's most typically apparent on

the scalp called cradle cap, and it occurs

from one month to one year.

It's a thick, yellow or white,

greasy, waxy, scaly crusting plaque.

The plaque is the thicker type lesion and

it does not cause permanent hair loss.

It can cause significant hair loss in the

short term, but the hair will grow back.

It can also occur on the face, the

diaper area and the area behind the ears.

And it looks similar to the cradle cap lesions, but

they can typically be more red as the lesions improve.

Just like eczema, the skin can lose

its pigment, but this will typically improve.

And it's not like eczema in that it's not itchy.

So that can help differentiate it from eczema.

Here's an example of cradle cap.

I'm sure all of you have seen

this a time or two in adolescence.

They also get cradle cap, but we call

it dandruff and it's a more white, fine

scaly dry scalp, and it has minor itching.

They can also get it in the area of the armpits,

the grind and the area in front of the elbow.

And again, it's more pink or

red there and it's more demarcated.

And there's an example of dandruff, and

this is an example of the other

areas that separate dermatitis can occur.

The external ear canal, most on the left of

the screen, the posterior auricular fold or the area

behind the ear, and then the nasolabial fold.

So treatment is frequent shampooing.

You can use over the counter dandruff type

shampoos like Head and Shoulders or T cell,

but it needs to have those active ingredients

on the screen zinc, selenium or silicilic acid.

And then if it's acutely inflamed, you

can use the topical steroid as well.

All right, getting into more Critters we have life.

There are three types.

The most common for children is headlights.

So that's the one we'll focus on most.

But you can also have pubic life and body lice.

And so the insect lives on the skin,

not like scabies, and periodically bites the patient

and the bite causes the symptoms.

So this is different than scapies in those ways.

Transmission is by direct contact and

this is the most common.

It can less commonly occur with indirect

contacts, with objects like helmets or brushes.

But this is again very uncommon and it's

important to know that it's descent flyer jumps.

So you really do have to have

the close contact to be infected.

It's most commonly seen in early school aged children.

It is not related to hygiene.

So kids who bathe five times a day could

get it just as easily as someone who hasn't

bathed in two weeks if they're exposed.

And for some reason it's rare in

the African American population, but that doesn't

mean that they can also get it.

And then again, there's a picture here and that's a

live Laos or one life critter symptoms include itching and

a crawling sensation on the scalp and you diagnose it.

Again, clinically, you take a fine tooth comb and

brush the hair to find the lice creature.

You treat the person.

Permethrin is the treatment of choice, just like scabies, and

you typically retreat a week to ten days later.

There are second line treatments that can be used if

the likes in your community are resistant to permethrin.

You should examine all family members, but only

treat those that have lice at that time.

Again, it's important to treat the environment.

So you're going to wash all linens

clothes in a machine, washed hot water

with high heat in the drying machine.

Any unwashable items should be sealed in

the plastic bag for two weeks.

And then all combs, brushes, things of

that nature should be soaked in detergent

or rubbing alcohol for an hour.

And then all things in the environment like

rugs or furniture or mattresses should be vacuum

to get off the light screener.

And again, it's important to know

when people can return to school.

And they should return to school

immediately after completing the first effective

treatment, even if Knits are present.

And Knits are the little eggs that the lights lay.

And the CDC also recommends that if a child is found

to have legs during the middle of the school day, they

should not be sent home early, but sent home at the

end of the normal school day to be treated and then

return it a day after treatment is complete.

And the reason that it's okay to leave the

child in school if they have Knits is because

the net is typically laid far enough away from

the scalp that they are not viable.

And then they also are attached very strongly

to the shaft that they're not easily transmitted.

Okay, pen worms.

It's a worm, and it's only host as humans, so

you're not going to catch those from your pet.

And the way that it's transmitted

is by ingesting the eggs.

And these are found in things like our hands, bed,

clothes, house, dust, and then the eggs hatch in the

stomach and then travel down to the large intestine.

And then at night, the worm comes

out your bottom and lays its eggs.

And the reason I'm explaining all this in

all of its gory detail is because it'll

explain why the symptoms are what they are.

So the symptoms are perie, anal

itching so itching around the bottom

hole, sleeplessness because of the itching.

And then if the eggs are laid close

enough to the vaginal area, you can also

have vaginas or itching of the vagina area.

Diagnosis is typically with the Scotch tape test.

So in the early morning, a parent will usually tape

a piece of tape onto the bottom hole and then

it's examined under a microscope to look for the worms.

Treatment is with an oral

medication, typically albinosol or mepindosol.

And there are other choices available if your particular

infection is resistant and then you should repeat the

medication two weeks later and it does not require

the patient to stay home from school.

All right.

Ringworm is a fungus infection, and depending on where it

occurs in the body, it has a different name.

And so Tinea Capitis is ringwarm of the scalp.

Tinea Corporus occurs on the body.

Tinea Cruis is in the groin

and Tineapitis is at the feet.

Tennia Catheters is a small oval patch on the scalp.

It's scaly and red, and it's easily differentiated from

other scalp lesions because the hair of the affected

area breaks off really close to the scalp.

And so you'll see kind of dark dots where the

bottom of the hair is coming out of the scalp.

And so because it's just breaking at the bottom

of the hair, the hair loss is not permanent.

So once the infection is treated,

the hair will grow back.

The treatment is with an oral antifungal because it

needs to go into the scalp, and you have

to treat at least four to six weeks, which

is a really long time, and you may not

see improvement, really, even the first couple of weeks.

So it's important to continue treatment

until the lesion is gone.

There are a couple of different choices.

The most common that I've seen lately is grizziofoldin, but

some areas still have fungus that is susceptible to fluconusole,

so you might often see that as well.

Tinnia, corporates or infection of the body, again, is

also a small red lesion, and it will typically

start as a papule or the small raised lesion.

And then it kind of spreads out to form a ring.

And you can have central clearing or the center of the

lesion becomes less red, kind of looking like a target.

The treatment can be topical if there's a small

area of involvement, but if there's a large area

of the skin that's involved, then you go ahead

and use the oral medication so that you're not

spreading medication over the entire body.

Tinyacruis or Jacques is ringworm of the

groin, and it's a little bit different.

It's still red, but it kind of takes on

this macerated look of the skin masquerade as being

kind of wet, open, like type lesion.

And then it has, again, the same scaly

margins around the edge of the lesion.

And most often, it's treated

with the topical treatment.

But if it's expensive, it can

be treated with an oral medication.

And it's important to educate on the type

of clothing that the person is wearing.

So you want to prevent long stay in a wet bathing suit.

You want to have cotton underwear.

You want to have loose fitting clothing so that you're

not trapping the heat and moisture in that area.

Tiny a pet or athlete's foot is

the fungal infection of the toes.

This is less common in children, but we

do see it in adolescents and young adults.

And it's similar to tennis crowds in that

it's the macerated look of the skin.

And this is a good example of what I

was trying to describe in the last slide.

You can see the peeling, the redness.

It kind of looks moist and wet,

and that's what it typically looks like.

The treatment is a topical antifungal, but if it's extending

to the bottom of the foot or the top of

the foot, we'll typically use an oral medication as well.

And because it's in such an at risk area, because

we're always in shoes, it's a wet, dark, moist area.

It's typically high recurrence rate.

This does not require the child to stay at home.

It's not that highly contagious, and so it

does not warrant them missing out on school.

Okay.

Chickenpox is something that we're seeing more

commonly now that we have a kind

of change in our vaccination rates.

So I included it even though we

still don't see a ton of it.

It's the varicella Zoster virus and incubation period is

the time from the infection to the time of

symptoms, and that is up to three weeks.

The prodrome, which is the symptoms that occur before

the rash, include a mild fever, feeling tired, you

have a bad appetite, and then you have this

sort of Lacey dotted rash associated symptoms, like I

said, are fever, and you can have oral lesions.

And then the rash takes a journey as it's forming.

So it first starts as red

papules, or those small raised lesions.

They then develop into the clear vesicles or fluid filled lesions,

and then they become cloudy, kind of more like a pustule,

and then they open up and form a scab.

And these occur in crops, and

they come in different stages.

So you might have some vesicles next to some papules.

And it's very itchy.

It typically progresses from the middle of the

body outward and similar to other lesions we

talked about today, because it's itchy, it can

put the patient at risk for super infection.

But if the patient is immunocompromised, so if they're

a baby or they have some sort of cancer

or immune suppression, they had a transplanted organ of

some kind, anything that puts our immune system lower,

they are much at higher risk for a disseminated

or all over body disease.

And that can include infection of the meninges,

the brain, the liver, and the lungs.

This is an example of the progression of the lesions.

So, at the beginning, you see the Papua.

It's just a raised lesion.

And then you'll see it start to form into

the clear, fluid filled vesicle, and then you start

to see it scab over and again.

Other examples of the rash.

On the right, you'll see labeled different

types of lesions, and they're all in

different forms or different stages of healing.

Treatment has many tiers, so there's no

treatment for the actual infection itself.

So you're treating symptomatically.

You want to treat the fever to make

them more comfortable with Tylenol or Ibuprofen.

Do not use aspirin and anyone

under 18 for any febrile illness.

And this is because, particularly with the flu

and varicella, it increases the risk of Ray

syndrome, which is a liver and brain disease,

and it can cause significant injury and problems.

Again, you want to treat the

itching with an oral antihistamine.

You want to prevent infection by keeping

the skin clean and preventing itching.

And then pain control is important, and some

people require up to opioids to feel comfortable.

Again, if you're immunocompromised, you require more

significant treatment with antivirals and vaccinations.

And then once all the lesions have scabbed

over, then the child can return to school.

Okay, embatigo this is a superficial infection

of the skin, and there's two types,

the bullets and non bullish types.

So, again, bullis is the larger fluid filled

lesion, and the bullish lesions are caused by

a bacteria that produces a toxin.

A toxin is a protein that destroys different

parts of the cells and this particular toxin

causes damage to the skin cells.

So the rash begins as a red macule.

That's the flat lesion that then develops into the bullet

fluid filled lesion and it sits on a red base

where the skin surrounding the lesion is red.

The bulla then ruptures and forms a clear,

thin varnish like coating over the underlying skin.

The non bullish type lesion is a more

superficial, less destructive infection caused by a bacteria.

This bacteria does not produce that toxin.

And the rash again starts as a papule and

progresses into a vesicle or fluid film and then

a pustule and then the pustule ruptures to reveal

the honey color exudate or filling.

And then that crossover and causes kind of an ulcer.

And because it's a superficial infection, fever is

not very common infatigo typically occurs around the

mouth or in the nasal labial fold area.

That's where you'll see it most commonly.

And this is examples of both the

bullets and non bolus type lesions.

On the right you'll see the non bolus lesions and you

can see that honey color fluid overlying the red beef.

Treatment is with a topical antibiotic and if

it's expensive or if the patient is having

systemic symptoms like fever cells, then you'll use

an oral antibiotic and 24 hours after treatment

has started, the patient can return to school.

And just a note about returning to school daycares.

And some schools are private organizations, so

they may have their own rules about

when kids can return to school.

But I gave you these parameters which are recognized nationally

as good rules so that you can have somewhere to

stand up for the child in returning to school.

And sometimes the daycare schools might just

need a doctor's note to more firmly

solidify that they can return to school.

Okay, well, thank you so much for this presentation and we are

going to open it up for our Q and A session.

So, as I had mentioned to everybody before, if

you could go ahead and chat your questions in,

I will be happy to present those for you.

And we did get one question that came in

during our presentation, so we'll start with that.

And it is what is the youngest age that a child can

have an allergy test to figure out why he has Eczema?

Allergy testing is not an exact science and so

it is important to consult with an allergist or

a pediatrician who feels comfortable in that realm.

But I would say the earliest that it might be

beneficial would be six months because before that the infant

doesn't have really their own immune reaction to things.

So six months is when they first

start developing the immune proteins that are

able to react to outside antigens.

Okay, we have another question.

Is it safe to use Eczema,

lotion and steroid cream together? Yeah, we use.

Them commonly together.

It would be important to put the steroid cream

on first because that's the medication that's treating what's

going on, and then the lotion can go on

over top of that to seal in any moisture.

If you feel uncomfortable with that or if you

feel like it's too much on the skin at

one time, it is okay to separate them.

So maybe do the stairy cream an

hour to separate from the lotion.

But the frequency is what's important with the

lotion and it's also the best time to

put on a lotion is right after bathing.

So right after bathing, when the skin is wet,

in addition to up to three or four times

a day would be a good regimen.

Okay, great.

Are there over the counter products for life treatment that

are effective or is it best to get a prescription?

No, the over the counter medication for life is

the appropriate treatment and then if that doesn't work,

then you could see your provider to write a

prescription, but the overthecounter medication is good.

Okay, can you discuss some natural treatments?

Many work on several of these

and are more economical and practical.

I don't have a lot of experience with

natural type products and I'm trying to think.

I know that honey is used commonly in wound

healing, so I don't know if that would be

helpful in some of the impetigal lesions, but I

don't know, give me a minute to think.

I don't use them super commonly.

I know honey orally, so like a teaspoon to a

tablespoon of honey is good for coughing, but no, I'm

sorry, I don't have a lot of experience in that. Okay.

Can adults get chicken pox or

measles when the children are infected? Most definitely.

If you have never had chickenpox, you can

certainly get it as easily as a child,

and oftentimes infection in adults is more severe.

And then you can also have reactivation of

chickenpox that you had as a child.

And that's called zoster.

That's the really itchy painful lesion that

you see commercials on the TV for.

But it's certainly possible for you to get chicken pox

if you've never had it, and if you've had it

or you've been vaccinated against it, but your immune levels

are not high, then you can also get it.

Same thing with measles.

And so particularly if you have an older

person or someone who has illness that's immunocompromised,

it would be important to keep them away

from the infected patient until they're well, until

all the lesions are scabbed over.

Okay.

Is there an overthecounter topical antifungal medicine

for tennis, corporate ringworm on the body?

Yeah, any of the anti fungals can be used on

the body like they can be used on the feet.

Again, if you have a large area, then

it's best to take an oral medicine.

Okay, what is shingles?

Shingles, like I just said or referred to a minute

ago, if you were infected with chickenpox as a child.

That virus sits in your nerves, and it just

kind of sleeps there until it's brought back out.

And so shingles is the reactivation of the chickenpox virus,

and it typically occurs in just one part of the

body, so, like one part, one side of the trunk

or one part of the arm, and it's those vesicle

fluid filled lesions that then erupt into a scab.

And it is different than chickenpox in that it causes

a lot more pain, a lot more itching, and can

result in pain after the lesions are healed.

But it's most commonly in older adults,

but it can occur in teenagers.

And for adults who have never had the

chicken pox, would you recommend pursuing the vaccine?

I think it's the same as with any other vaccine.

If you want to help protect yourself from it, then

it would be helpful, and it can also help prevent

the Zoster reactivation later in life as well.

And again, that can cause a lot of pain

and difficulty if you have a severe case.

What's the distinct features between

the Mangolian spots and eczema?

Because sometimes it can be confusing

to distinguish between the two.

Okay, a Mongolian spot is a birthmark,

and it's most commonly present from birth.

And it's darker, so it's kind of a blue, black,

purple color, and it's a patch, the bigger, flat lesion,

it's most commonly on the back, the lower back, or

on the legs, and it's usually there from birth.

Eczema is a more red, thick type lesion.

That's itchy.

Mongolian spot will not itch.

The child won't even know that

it's there unless they see it.

But an eczema rash comes and goes.

It's itchy, it's thicker, it's red, and again,

it can be brought on by triggers.

The Mongolian spot will usually be there forever.

It might fade as the child

gets older, but it's a birthmark.

Okay.

Can adults get booster shots back to chickenpox for these

childhood diseases if they had shots as a child? Yeah.

We don't commonly revaccinate for chicken pox, but we

didn't start vaccinating for it until several years ago,

and so all vaccines can be boosted.

But I think what typically happens for adults, because they

aren't as high risk in, like, the 30 to 50

age range, they'll get the shingles vaccine, which is similar

to a booster for chicken pox as they get older,

and that helps protect them from Zoster.

But for measles or for diphtheria or for pertussis

whooping cough, you can get a booster, and that's

recommended every ten years, the T vaccine, particularly if

you're caring for small children, because we have lump

and cough in our area, so that needs to

be given every ten years.

That's good to know.

Can a child be infected with chicken pox

from contact with an adult who has shingles? Yes.

Okay, we have another question.

Is there an overthecounter topical

antifungal medicine for tennis?

Corporate loachman?

Is the common name, but it's available

at any pharmacy or grocery store.

And you can just look for antifungal.

They're all similar.

But again, if it's a large area of

the skin, then you need an oral medication.

And the topical treatment can take just as long,

four to six weeks for it to go away.

And I would say it's totally acceptable to try

to treat over the counter if you feel like

it's ringworm before going to see your doctor.

I think that would be fine.

Is there a cure for eczema?

Not a cure, because, again, it's

related to the body's immune response.

And so the treatment would be getting rid of

the triggers and treating the symptoms, but there's no

cure because it's a genetic rooted problem.

Well, I believe that we do

not have any further questions.

So I'd like to thank everybody for joining us.

And particularly, I'd like to thank

our presenter today, Catherine Guthrie.

And this was a wonderful presentation, and we're

so excited to bring it to you.

And we hope that it will help you in

your foster parenting and taking care of the children.

I'd like to thank you for joining us today.

And this does give conclude our broadcast.