# TICKS AND TICK-BORNE ILLNESSES

# Ticks suck. Yeah, I said it.

As a pediatrician, I get a lot of questions about ticks and the diseases they carry. This is especially true during the summer months here in rural Georgia, when tick bites are more common. Fortunately, most tick bites are harmless. But just in case you discover a tick on your child, here is the information you need to know.

### "What kind of ticks should I worry about?"

Ticks come in a variety of colors and sizes. Not all tick species attach to humans, and not all species carry disease. There are three or four main types of ticks in the South that carry serious diseases. Some species can even carry more than one serious human disease! But just because you get bit by one doesn't mean you'll get sick. The likelihood of getting sick from a tick bite - even one of these disease-carrying types - depends on how long the tick was attached, how the tick was removed, and many other factors. So, even if you do get bitten by a tick, you stand a good chance of not getting sick.

Also, don't listen to those who say tiny ticks are bad but large ticks are okay. Descriptions of tick size, coloring, or shape are so subjective that these characteristics often have little to do with which disease a tick carries, if it carries one at all. As a doctor, I would focus on how your child feels and the circumstances of the tick attachment rather than whether the tick was described as "tiny." The point is you should not worry about any certain type of ticks. Rather, you should focus on preventing tick bites, and removing attached ticks promptly and safely.

#### "What kind of diseases can I get from a tick bite?"

Tick bites cause only local irritation of the skin most of the time. However, tick bites can cause two problems that would require a doctor's help. First, they may cause a skin infection at the site of attachment. This may be painful and ooze pus, but it's usually not that serious and can be treated with antibiotics. Second, some ticks may carry serious and life-threatening diseases like Lyme disease, Rocky Mountain spotted fever, tularemia and ehrlichiosis. Lyme disease is most common in New England, but it has been seen in the Southeast as well. And yes, you can get Rocky Mountain spotted fever even if you're not in the Rocky Mountains. Fortunately, these diseases are not common, when you consider the large number of tick bites there are.

#### "What should I watch for after the tick is removed?"

Most commonly, the only signs you'll see after tick removal are redness and a little painless swelling at the site of the bite, like the kind you get after a mosquito bite. This usually lasts less than a week and goes away without any intervention. A local infection, as mentioned above, might show an enlarging area of redness and worsening tenderness. This would need to be seen by a doctor.

The signs for the serious diseases mentioned above usually include fever, rashes, muscle cramps, fatigue, nausea and vomiting. Some people might tell you to watch for "classic" signs, like the bulls-eye rash seen with Lyme disease. But these signs might be missed or might not show up at all. My advice is to play it safe – if your child has recently been bitten by a tick, and now has fever and rash or any other worrisome signs, take your child to the office.

#### "What's the best way to remove a tick?"

Ticks should be removed promptly and completely. The best way is to grab the tick by its head, as close to the skin as possible, with a pair of fine tweezers. Try not to grab the tick's body, as this might force the contents of the tick's stomach back into the wound. And don't use your fingers, for the same reason. Once you've got the tick by its head, slowly and steadily pull the tick directly away from the skin. Don't angle the tweezers or twist, as this might make the tick's head come off in the wound! Once the tick comes out, look at the bite. Can you see any tick parts left? If there are, do your best to remove them. Then clean the area with soap and water and apply a topical antibiotic like Bacitracin or Neosporin. Flush the tick down the toilet, because as cool as a squished tick might look, there's not much point in showing it to the doctor. And remember to wash your hands afterwards.

Family members might mention using alcohol, gasoline, matches, fingernail polish or other toxic items to make the tick surrender. Unfortunately, none of these items work consistently. Most of them will drive the tick deeper into the wound, or cause the tick to regurgitate, making the wound more likely to become infected. Follow the steps above and forget these old remedies.

## "What's the best way to prevent a tick bite?"

Obviously, it's much better to prevent tick bites in the first place. Just a few simple steps can help lessen the chance you or your child will find yourselves at the mercy of a hungry

tick. First, avoid areas that might harbor ticks. Most ticks climb from the ground or plants, so try to stay away from tall brush and long grasses. If you have this sort of vegetation in your yard, remove it. Check your pets for ticks, and ask your veterinarian to help you fight any infestations. Second, if avoidance is not possible, take steps to lessen the likelihood of a tick getting onto your skin. Have your children wear long pants and close-toed shoes, and tuck the pants into their socks or boots if possible. Light-colored clothing also makes ticks easier to see before they get attach to the skin. Insect repellants sprayed on the skin or clothing is also a good idea. However, be careful when using repellants that contain DEET on children – it can have side effects. A repellent with no more than 10% DEET should be fine. The final step is self-inspection for ticks. Perform a good "tick check" a couple times a day if your child's been outside. Don't forget to check the scalp and behind the ears!

#### **Summary**

While ticks can carry serious diseases, most tick bites are harmless. It is important however to remove ticks promptly and completely to lessen the chance of a serious infection. Prevention of tick bites is of utmost importance. Avoidance of tick infested areas, wearing of protective clothing and repellents, and close self-inspection are keys to staying healthy and enjoying the great Georgia outdoors.