## Lyme Disease in Children

Diagnosing Lyme disease in children can be difficult, because: they may not look sick; children may be unaware that a constant headache, ringing in the ears, and numbness and tingling aren't normal and may not report it; they may be unable to describe their symptoms; and frequent complaining may cause adults to think they are just trying to get attention. Pains can come on suddenly and be very intense, and then suddenly be gone. This may be difficult for adults to understand and believe.

Children with Lyme disease often complain of headaches, stomach pain (sometimes accompanied by an ulcer), chest pain, ear aches, sore throat, and joint and muscle pains. Joint pain may or may not be accompanied by swelling. There can be episodes of stiffness. Headaches can be frequent or constant, lasting months or years. They can be mild, or so severe that medication doesn't totally relieve them. Sunlight can cause eye pain and make headaches worse. Children with Lyme disease may need to wear sunglasses at recess, even on cloudy days, and maybe even indoors. They may need to go to the bathroom frequently and suddenly, and may not be able to wait for the teacher's permission. There may be vision and hearing problems, which may come and go.

Cognitive problems can come and go throughout the day. Concentration and memory problems can make math especially difficult. Slowed thinking can make it difficult to comprehend oral and written language. A child with Lyme can suddenly not recognize familiar places and can get lost in the school. The disease can cause learning disabilities and low IQ scores. Word, number and letter reversals in written and oral speech (dyslexia) are common. Sometimes IQ scores jump after a child begins antibiotic treatment. Children with autistic or psychiatric symptoms may talk and act normal when on antibiotics.

Children with Lyme can be too tired to go to school and may need to go part-time or receive home schooling. The symptoms and severity of symptoms can vary from day to day. A child may feel well enough to go to school one day, but not the next. Absences may be frequent. The children can also have social problems, being too tired to play with friends, and being teased if they have trouble walking, talking, or learning. Other children may avoid them, because of an unfounded fear that the disease is contagious. Lyme disease can cause sudden panic attacks, irritability and mood swings. Children with Lyme may have only mild problems, or the effects can be severe enough to put a child in a wheelchair. Children whose mothers have active Lyme disease during pregnancy can be born with damage to the brain, heart, liver, and other organs. They can have a variety of problems, including frequent illness, speech delays, other developmental delays, or severe multiple disabilities. Antibiotic treatment throughout pregnancy can prevent congenital Lyme disease.

## Lyme Disease in Teenagers

Teenagers with Lyme disease also have special problems. The disease can cause a sudden drop in grades, mood swings, depression, suicidal thoughts, personality changes, sleep problems, poor concentration, cognitive problems, and a loss of interest in school and school activities. These changes can be mistaken for drug abuse. A drug test is often ordered to rule this out. Hormone changes can also be blamed, or teenagers can be accused of being lazy or rebellious and not trying hard enough in school. All these problems can make it more difficult to get diagnosed.

Teenagers with Lyme may be too tired to attend school or to complete their work. They may need to go to school part-time or not at all. Home teaching may be needed. They may have a drop in grades, especially in subjects that require a person to remember previously learned concepts, such as math, foreign language, and chemistry and other science courses. They may do fine in history and English.

Loneliness can be a problem for teenagers with Lyme. They may be too tired to participate in social activities with friends. It's hard for them to predict how they will feel from day to day, making it difficult to make social plans, which often have to be canceled. (This withdrawal from friends is not typical of drug abusers, who may change friends, but will socialize.)

Students who are ill with Lyme disease in high school are often feeling better and performing better by the time they go to college. They can arrange for an untimed SAT test with a letter from a doctor. They may need this, since Lyme disease slows the thinking. If a Lyme patient has a year or so of poor grades from illness, the doctor can write a letter explaining the health problems and asserting that the patient's health is improving with treatment. This letter can be included with a college application.