



It's Lyme disease season in Minnesota, and the rapidly rising number of cases plus growing frustration with mainstream medicine have made the topic more urgent than ever.

BY WILLIAM SWANSON

One morning last summer, Kevin Stephan woke up to find one side of his face numb. “Then, within a week, the numbness had spread to my right arm,” Stephan recalls. “Then there was clumsiness—I couldn’t type, I’d miss the phone when I’d reach for it, and I’d run into the frame of the door. My right leg became so uncoordinated I couldn’t walk in a straight line.”

Stephan is a physician—he chairs the infectious disease department at the Duluth Clinic—but neither he nor his colleagues could figure out what was wrong with him. The results of an MRI suggested that a stroke was at least a possibility; multiple sclerosis was likewise not out of the question. But Stephan, who was forty-three, physically active, and in excellent health, had none of the risk factors or a family history that would indicate either. As it happened, Stephan had been seeing a growing number of Lyme disease patients in his practice—by his estimate, at least 500 cases in the previous three years. And while his symptoms weren’t typical,

Tick, Tick, Tick . . .

Lyme was proving to be a disease to which “typical” didn’t typically apply. So he ordered a blood test. But even after the test came back positive, the debate continued. “Should we call it Lyme, or shouldn’t we?” he says, summarizing the discussion. “Eventually, that diagnosis prevailed.”

Stephan was one of more than 1,230 new Lyme cases reported in Minnesota last year, which doesn’t seem like such an alarming figure until a state epidemiologist tells you the number represents about a 35 percent increase over the previous year—and that the number has been rising steadily since the state began tracking cases in 1982 and has risen precipitously since 2001. Worse, some experts and observers posit a factor of ten when attempting to determine an accurate tally, meaning, in Minnesota, there may have been as many as 12,000 new human Lyme infections—most of them undetected, misdiagnosed, or unreported—in 2007. Wisconsin reported more than 1,800 cases last year, up from about 1,460 in 2006.

Minnesota and Wisconsin (where an estimated 20 percent of Minnesota cases contract the *Borrelia burgdorferi* bacterium) are among the top dozen states in numbers of Lyme cases. That’s because the disease’s vector—the very small and insidious deer tick (sometimes called the blacklegged tick), which carries the bacterium—is most commonly encountered in or near hardwood forests, home to deer, mice, and the tick’s other warm-blooded hosts, and states in the Northeast and eastern Upper Midwest have a lot of hardwood forests. Minnesota’s hardwood is concentrated in its central, eastern, and southeastern counties, though Stephan says he’s treating more and more Lyme patients from Ely, International Falls, and other points way up in coniferous territory. And, while portions of Anoka, Washington, and Ramsey counties are prime deer tick areas, Metropolitan Mosquito Control District researchers have found “isolated populations” in every metro county.

It wasn’t a coincidence that Stephan first noticed his symptoms this time of year. May through July is the period

when the bloodsucking arachnids—deer ticks are eight-legged arthropods related to spiders and mites—are feeding in greatest numbers and mammals, including humans of both sexes and all ages, are thus most vulnerable to the often perplexing and increasingly controversial disease that didn’t even have a name until thirty years ago.

Since it was first identified in the United States, among residents of Old Lyme and other leafy communities of southern Connecticut in the mid-1970s, Lyme disease has been wrapped in mystery, confusion, and growing contention.

While only a generation ago the condition was virtually unheard of in the Upper Midwest, now it’s a rare

itself several times since that initial diagnosis.

Most Lyme cases, if caught early, are effectively treated. After a weekend at the cabin, a patient shows up at a clinic with a small red bite, or the attached or imbedded tick itself, or a “bull’s-eye” rash (*erythema migrans*), which may prefigure or accompany flu-like aches and pains and fatigue that often develop within a few days or weeks of the bite. The doctor may order a blood test. If Lyme is diagnosed, two to four weeks of a common antibiotic such as doxycycline or amoxicillin will usually be prescribed, and, in maybe nine out of ten patients, the symptoms disappear.

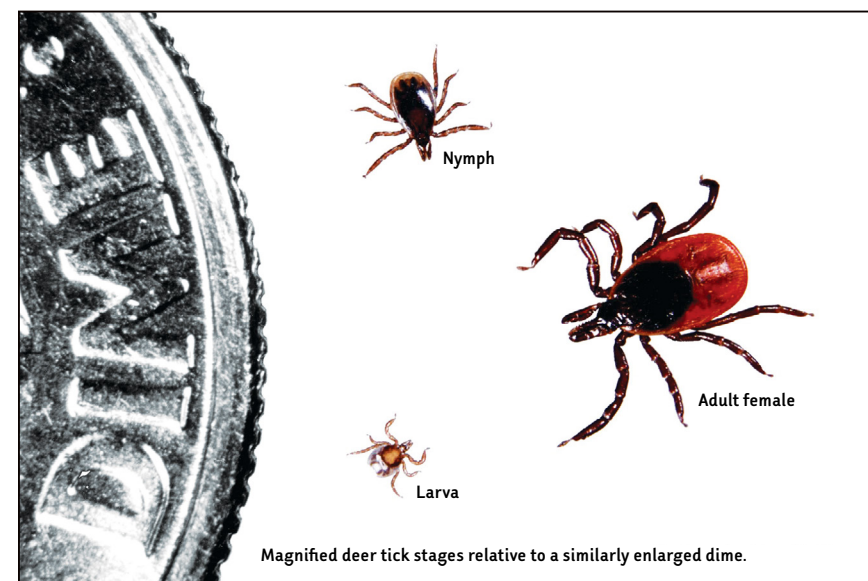
Unfortunately, the process doesn’t always work that way. Patients over-

ing (neurological, heart, and lung complications, memory loss, severe depression, extreme fatigue, crippling arthritis). Then again, what’s making you feel like death on a stick after a weekend in the woods may *not* in fact be Lyme, even if you’ve been bitten—the Minnesota Department of Health estimates that “only” a third to a half of the deer tick population carries the Lyme infection. On the other hand, a single tick may carry multiple infections, including, in our part of the world, less common but potentially serious babesiosis and human anaplasmosis. And even though you’ve had Lyme, you can contract it again. If left untreated, Lyme can cause devastating long-term problems involving the heart, nervous system, muscles and joints, and other parts of the body.

In local Lyme annals, Jill Kuschel’s story is probably neither typical nor unique. In the fall of 1997, she was bitten by a tick at the cabin near Cross Lake she shared with her husband and three daughters. The embedded tick was removed in urgent care, and a doctor prescribed ten days of doxycycline. At the time, Kuschel—a petite, trim, energetic woman—was a nurse in the burn unit of Regions Hospital in St. Paul. She was thirty-nine years old and an avid runner, and she believed the antibiotics had “taken care” of whatever threat to her otherwise healthy system the tick bite might have presented.

Then, about six months later, she says, “I felt as though I had the worst flu of my life. It hit me and never went away. I was bedridden. I started getting other symptoms—pain in my muscles and joints, a numbness and tingling, then pretty soon I couldn’t lift my arms above my shoulders.” After about a month, she was forced to take a leave of absence from her job. She was tested for MS, ALS, and lupus, among other conditions, but the tests came back negative. Her family doctor finally diagnosed fibromyalgia—another shadowy disease with many nonspecific symptoms—and told her there was nothing he could prescribe besides a sleeping aid and suggested massage therapy and a chiropractor for relief from some of her symptoms.

“I lived with that until 2006,” she



Magnified deer tick stages relative to a similarly enlarged dime.

IMAGE COURTESY OF THE MINNESOTA DEPARTMENT OF HEALTH

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Minnesotan who, if he hasn’t contracted it himself, doesn’t have at least a couple of acquaintances who’ve had a brush with it. A neighbor and the husband of a colleague—Minneapolis residents who own cabins in central Minnesota—have both had Lyme in the past few years, one of them twice. A friend who’s lived in rural east-central Minnesota for decades became one of the state’s first diagnosed patients when a visiting researcher at the Mayo Clinic, pondering the cause of the man’s painfully swollen knees, made the call in the early 1980s. Years ago, the man says, the condition seemed rare and freakish, even in his neck of the deciduous woods. “Now, to hear people talk, it’s as common as the cold up here,” he says. He believes, moreover, his own Lyme has manifested

look or ignore the tick bite, then attribute their symptoms to the flu or overexertion or, in some cases, to more serious conditions such as MS or amyotrophic lateral sclerosis. A doctor, if one is consulted, may find no rash (Kevin Stephan had none, and, according to experts, a rash isn’t present in from a fourth to a third of all Lyme cases) and misdiagnose or dismiss the symptoms, which are often vaguely “nonspecific” and can be attributed to any number of other causes—or to the patient’s imagination. Lists of symptoms blamed on Lyme number well over 100. Individual symptoms can vary widely from patient to patient, affect virtually any part of the body, come and go, and run the gamut from merely annoying (mild headache and chills) to debilitating and life-chang-

Staying Safe in the Woods

“The deer tick needs a place where it’s protected from the elements, enjoys high humidity levels, and has access to the animals it likes to feed on—and that [place] is mainly leaf litter on the ground in hardwood forests,” says Minnesota Department of Health epidemiologist Melissa Kemperman. “Tick larvae and nymphs tend to feed on mice, other small mammals, and ground-foraging birds, while adult ticks look for larger mammals such as deer.” May through July is the highest-risk period of the year, when both nymphs and adult ticks are most active, though the adults are active again in the fall.

“Ticks don’t drop from the trees and they don’t fly,” Kemperman says. “They often come up from the ground or from the brush a foot or two above the ground, attach themselves to your body, and crawl up your legs under your clothing. You may not feel a bite.” Here’s the good news: The tick must be attached to your skin for between twenty-four and forty-eight hours to transmit the Lyme infection, so you have time for a thorough inspection after

you’ve been exposed. The bad news? You have to look very carefully, because a deer tick nymph is about the size of a poppy seed and the adult not much larger than a pin head. More bad news: Ticks may hitch a ride inside the house or cabin aboard your dogs and cats, which are also vulnerable to the infection, though the ticks probably won’t live for more than a couple of hours in the dry conditions of your home.

To avoid tick bites when in the woods, the MDH urges that you use repellents containing DEET or permethrin, wear light-colored clothes on which ticks are more easily seen, and tuck pant legs into socks or boots. When you come inside for the day, check yourself thoroughly. Ticks seem especially fond of the areas behind the knees and around the waist. If you find a tick, carefully remove it with a tweezers and apply antiseptic to the bite.

If you experience symptoms within a month after you’ve been in the woods, whether you have the telltale rash or not, it would be wise to check with your doctor.

More about Lyme

Virtually unheard of a few decades ago, Lyme has become one of the most talked-about diseases in our part of the country. Extensive information on its causes and effects is available online from dozens of governmental, medical, and academic sources, among them:

- Minnesota Department of Health, health.state.mn.us
- University of Minnesota, umn.edu
- U.S. Centers for Disease Control, cdc.gov
- National Institutes of Health, nih.gov

Advocacy groups offer sometimes divergent points of view on “chronic Lyme” and other topics, as well as the experiences of Lyme patients here and around the country. They include

- Minnesota Lyme Action Support Group, mlasg.com
- Lyme Disease Association, lymediseaseassociation.org
- International Lyme and Associated Diseases Society, ILADS.org

The disease’s curious history is the subject of *Bull’s-Eye: Unraveling the Medical Mystery of Lyme Disease*, a book by Jonathan Edlow, M.D. (Yale University Press, paperback). —W. S.

says. “By that time, I was able to go back to work, though I had to take a slower-paced job and could work only very part-time. I couldn’t run anymore, and some days my joints and muscles were so sore I could hardly walk. The massages and chiropractic care helped, but, overall, things were pretty bad.” She and her husband sold their cabin and started talking about nursing-home insurance—though she was still on the sunny side of fifty, the prospect of long-term care didn’t seem remote anymore.

Then, while working at a clinic in Wyoming, closer to her home forty-five minutes north of St. Paul, Kuschel happened to connect with an old high school classmate. Elizabeth Maloney had become a family doctor, married another physician, and practiced at an Allina clinic in nearby Forest Lake. Maloney had become interested in and knowledgeable about Lyme. She urged Kuschel to get tested again and to attend a support group in Forest Lake. “I went to their next meeting and met about twenty-five people who had many of the same symptoms I had,” Kuschel recalls. “It was incredible, like a mirror image—so much of what I was going through many of the others were going through too.” Kuschel was directed to a “sympathetic” doctor in St. Paul, waited three months for an appointment, and was finally evaluated and retested positive for Lyme. She came to believe, in retrospect, that her initial Lyme infection had been undertreated and was never destroyed.

“Since then, I’ve been on antibiotics—first oral, then intravenous, now oral again—and I’m back to about 80 percent of where I was before I got sick,” she says. “Which my doctor says will probably be as good as it gets.” She says she still suffers from headaches, occasional fatigue, “word-finding problems,” seizures, and joint pain. And she and her husband have also had to deal with the overlapping conditions of all three of their daughters, who have each been diagnosed

with Lyme and have battled severe headaches, fatigue, and lack of concentration, among other symptoms, which have made school and work difficult and sometimes impossible. All three have been treated with antibiotics, she says, and two of the three are now feeling good enough to resume college and get on with a career, though the third “still struggles” with her condition. Last summer, for the first time, Joe Kuschel, a sales rep for a local food distributor, displayed the bull’s-eye rash, probably having been bitten by a tick that rode into the house on the family’s golden retriever. “We got Joe to the doctor, and he was treated with antibiotics for two months,” Jill says. “Thankfully, other than the rash, there were no symptoms and he’s fine.”

Jill is currently working as many as four days a week and, despite the almost Old Testament level of her family’s travails, tries hard to maintain an upbeat and positive attitude. “We decided not to let it take over our lives,” she says, knowing, from the experience of other “Lymies” she’s met and heard from, that, like any debilitating condition, Lyme disease can ruin careers, destroy families, and foreclose a promising future. “I can’t tell you how many people have lost their homes and been financially strapped,” she says, noting that even with her husband’s “excellent” insurance coverage, the Kuschels paid about \$12,000 out of pocket last year for medications, consultations, and related expenses.

Of her own cluster of Lyme symptoms, she says, “It kind of waxes and wanes,” adding with a laugh, “I’ll never run again, but I can walk.” She also says she spends an hour or two a day as president of

the Minnesota Lyme Action Support Group, her current avocation.

Kuschel, Maloney, and uncounted other patients in Minnesota and across the nation would describe her condition as a chronic, or persistent, form of Lyme disease. If you have “chronic Lyme,” its believers say, the infection or pathogen lives on in your body, mutating but not dying, thus prolonging or adding to your misery long after conventionally prescribed dosages of antibiotics run their course.

Most physicians, epidemiologists, and institutional experts, here and elsewhere, however, strongly disagree.

In October, a panel of Lyme specialists from around the country published “A Critical Appraisal of ‘Chronic Lyme Disease’” in *The New England Journal of Medicine*, calling the term a “misnomer.” It describes, they said, “the latest in a series of syndromes . . . postulated in an attempt to attribute medically unexplained symptoms to particular infections.” Beyond the diagnostic rhetoric, the rub is the treatment that’s prescribed—or isn’t. So-called “Lyme doctors” (“Lyme-literate” physicians to their champions) are often willing to prescribe a course of antibiotics that extends beyond—sometimes far beyond—the thirty-day limit established by the Infectious Diseases Society of America in 2006. The journal authors argued that “the use of prolonged, dangerous, and expensive antibiotic treatments for [‘chronic Lyme’] is not warranted.” Earlier in the year, one of the article’s authors was even blunter when talking to *Newsweek*, saying, “The majority of patients treated for ‘chronic Lyme’ do not have post-Lyme and in fact never, ever had Lyme disease at all.”

Melissa Kemperman, an epidemiologist at the Minnesota Department of Health, says the MDH follows conventional antichronic thinking (and, for that matter, the positions of the Centers for Disease Control, National Institutes of Health, Mayo Clinic, and other mainstream institutions)—to wit, that “reputable studies” show that there’s no such thing as “chronic Lyme” and extended antibiotic use can be harmful. “In the medical community and the public health field,”

Kemperman goes on to say, “it’s not really much of a controversy. The bulk of the medical evidence shows that three or four weeks of antibiotics will clear up the infection and that a lot of people who think they have chronic Lyme are actually suffering from something else and long-term antibiotic therapy is not the solution to their problem.”

At the University of Minnesota, Craig Hedberg says he believes *The New England Journal* article “represents the synthesis of the best science so far as it relates to so-called chronic Lyme.” Hedberg is an epidemiologist, and epidemiologists “look at populations, not the individual,” and, “on a population basis, there is significant cost to treating people who don’t have diseases that can be treated with antibiotics.” In the studies Hedberg has seen, he says, long-term antibiotic treatment has not helped patients, while there’s little doubt, he says, that the overprescription of the drugs is pushing the development of antibiotic-resistant “superbugs” in the general population. “If there weren’t significant downsides to the treatment,” he says, “it wouldn’t be an issue.”

Needless to say, the “chronic Lyme” forces responded quickly to *The New England Journal* position. The International Lyme and Associated Diseases Society, based in Bethesda, Maryland, released a statement arguing that “the article does not reflect real-world patient experience with the disease” and “perpetuates the narrow viewpoint” of a cadre of academic researchers. The websites and blogs of patient advocacy groups and individual Lyme sufferers lit up the Internet. Some critics accused mainstream researchers and physicians of conflicts of interest and alleged that their objectivity has been compromised by the not-so-invisible hand of pharmaceutical manufacturers and insurance companies, which have their own reasons to deny “chronic Lyme.” Here at home, Betty Maloney wrote a letter published by *The New England Journal* in January, raising points of science that, she says, challenge the October findings and show “characteristics favoring persistence and necessitating longer courses of antibiotics.”

Some mainstream doctors have cautioned that “Lyme anxiety” may be a greater threat than the disease itself, and the controversy has, in some places, reached fever pitch. State medical boards have brought or threatened sanctions against physicians treating Lyme patients beyond conventional standards, while sympathetic lawmakers have drafted legislation to shield “Lyme doctors” who prescribe extended antibiotic treatment. (Bills prohibiting the state’s medical practice board from disciplining doctors for prescribing long-term antibiotic therapy were introduced this spring in both the Minnesota House and Senate.) Two years ago, Connecticut’s attorney general launched an investigation of the IDSA, which issued the treatment guidelines; other attorneys general

why you’re there. The medical board may not understand why you’re there.” Meanwhile, “of 100 patients diagnosed with early Lyme disease, you’ll probably get ten to fifteen who aren’t successfully treated and are likely to have long-term problems.” And there’s no telling how many persons who are never diagnosed or treated wind up with those problems.

“*Borrelia burgdorferi* is a complex organism,” Maloney says. “It has different forms and can switch forms under different conditions. Thus, when there’s treatment failure, there are a whole host of things we should be considering. People do reach a point where further antibiotic treatment is not going to help, but when that point occurs should depend on the individual, not an arbitrary ‘four weeks and

“We decided not to let it take over our lives,” she says, believing that Lyme disease can ruin careers, destroy families, and foreclose a promising future.

around the country have taken action against devices marketed as Lyme remedies. Famous patients such as author Amy Tan and singer Daryl Hall are featured in demands for increased research funding, and a feature-length documentary film that promises to “uncover the shocking human, medical, and political dimensions of Lyme disease” is due out this year.

“Lyme has become a very political disease,” Maloney says. She says her objective these days is to educate her fellow physicians, who, she believes, are missing too many Lyme diagnoses and doing too little to alleviate patients’ pain and suffering. “It isn’t as though I am some fringe practitioner or maverick,” she says, while acknowledging that her position challenges medical orthodoxy. “Sometimes, when you’re on the cutting edge,” she says, “your fellow physicians may not understand

you’re done’ rule. The very real risk of too much antibiotics has to be balanced against potential gains. With Lyme disease, you want to make sure you kill the bacteria, then stop.”

The controversy does not end with treatment. There are two standard blood tests for Lyme, ELISA and the Western blot. Critics say the tests are “insensitive,” return too many false positives, and can vary widely depending on which lab is providing the results. The health department’s Kemperman says, however, that “ELISA is very sensitive. It’s going to catch most people who have Lyme disease, and, yes, it’s also going to catch some people who don’t. But, if you combine ELISA with the Western blot, you’re likely going to exclude the people who don’t have it. Combined with the presence of a rash, other objective signs such as swollen joints and

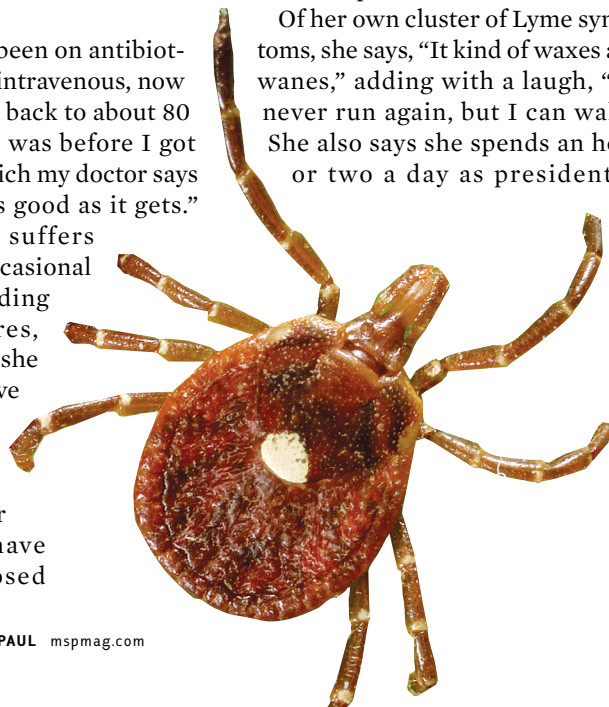


IMAGE COURTESY OF THE MINNESOTA DEPARTMENT OF HEALTH

Bell's palsy, and a history of exposure to deer ticks, it's a pretty good indicator of Lyme." Maloney, for her part, has written, "testing does not offer a reliable laboratory shortcut to the diagnosis of Lyme disease." Lyme, she says, "remains a clinical diagnosis" based on "exposure history, symptoms, and exam findings."

Some advocacy groups have suggested that the disease, once contracted, may be transmitted to others via breast milk and sexual contact, but the CDC and other official sources categorically refute both possibilities.

Though the situation in Minnesota has not been as bruising as it's been in other areas, the frustration is obvious on all sides. Kemperman puts it this way: "One group is saying, 'We have chronic Lyme,' and another group—largely the medical profession—is saying, 'You might, but probably don't.' Causality is important. You can have an association between two things, but determining whether A actually causes B is another matter. The problem is, people are suffering."

Once Kevin Stephan, the Duluth infectious disease doctor, was certain he had Lyme disease, he suggested he be prescribed what amounted to a two-month course of ceftriaxone and doxycycline. "I got a catheter put in my arm and infused myself even while making my rounds," he says, laughing. He concedes that, by the current standard, two months was a long time to take the antibiotics.

"But here's the deal," he explains. "I felt better at one month, which may be what the guidelines say, but I didn't feel normal. I was still numb occasionally, I couldn't use my hand completely, and my face still felt funny when I shaved. So I thought, 'What if we have the disease up against the ropes, but haven't knocked it out yet?' I was tolerating the antibiotic, I wasn't getting sick from it, and the lab results [to monitor possible harmful effects of the antibiotics] looked good—so why not one more month? There are those who say, 'Well, you might have gotten completely well if you had stopped at one month'—but I have no way of knowing that. I based the treatment on my symptoms, and I treated [the dis-

ease] until the symptoms were gone, and the symptoms haven't come back. I just feel so good again. I'm back running twenty-five to thirty miles a week and haven't had any residual problems whatever."

"Lymies" say Stephan is one of only two "Lyme-literate" physicians in Minnesota—and he is apparently the only one willing to talk about his practice. Even so, he's uncomfortable with the handle. "It's not necessarily a compliment," he says with a sigh. "As you know, there are a lot of opinions as to what Lyme is and what it isn't and how you should or shouldn't treat it. Being closed-minded on either end of the spectrum is probably not appropriate. When there's good science, I try to use it because I believe in evidence-based medicine. Quite frankly, I don't think the science has caught up with the patients. We have a fairly rudimentary understanding of what this spirochete can do when it gets in the body. On the other hand, there are physicians who think we know pretty much everything there is to know about it and the case is closed. The more cases I see, the more I'm humbled by what we don't know."

Stephan says that when he first arrived in Duluth from San Antonio, Texas—a relatively Lyme-lite zone—he had little experience with the disease and hewed closely to the profession's guidelines, meaning a fairly narrow range of symptoms and a relatively short course of antibiotic treatment. Taking a conservative approach, he says, he turned patients away who didn't report a positive blood test. Then a few cases began changing his mind. With increasing experience, he says, "I became more confident that perhaps some of the conventional wisdom wasn't completely correct."

Now, having seen several hundred Lyme cases in Minnesota, he's willing to look at a greater range of possibilities in both diagnosis and treatment. "I'm seeing some clinical presentations that are probably a bit outside what the average physician would recognize as standard Lyme," he says. "For instance, I think there are more neurologic symptoms that could be due to Lyme disease—some of this has to be worked out with good studies, but what I'm seeing anecdotally are patients who

might have been initially diagnosed as having a tremor disorder such as Parkinson's or a progressive disorder like MS who have strongly positive Lyme tests, and a number of them—not all of them—improve when treated for Lyme. Then there's a whole group of patients whose predominant symptom is devastating fatigue or cognitive problems. They don't have full-blown dementia, but they have difficulty concentrating and focusing and some of them can't perform at work and need to sleep all the time. The traditional way to approach that is to do a bunch of tests and if you don't find an answer say it's chronic fatigue syndrome or fibromyalgia. But I'm finding a fair number of these patients who've spent a lot of time in the woods and have had tick bites and also have positive blood tests. Well, if you've been exposed to Lyme and you get better with Lyme treatment, I have trouble calling that fibromyalgia or chronic fatigue.

"There are so many symptoms that could apply to so many conditions—that's the confusing part, you bet. On the other hand, if someone says he's fatigued and hurts all over and while he used to run triathlons now he can't climb a flight of stairs—it's tempting to say it's just in his head, he's depressed, or whatever. But if he has a positive Lyme test and he responds to antibiotics, I'm tempted to call it Lyme."

Stephan says some of his fellow infectious disease specialists have been skeptical, but makes it clear he's board certified in both infectious disease and internal medicine and heads the infectious disease unit of a prominent clinic—in other words, he's not a "fringe guy" or a "quack." "I share the concern with my colleagues that the overuse of antibiotics is a bad thing," he says, and he's concerned that some of the more extravagant claims about Lyme transmission may damage legitimate inquiry and discussion. "I'm just trying to strike a balance between what the evidence will support and providing good medical care and keeping an open mind," he says. "Once I had Lyme disease myself it solidified my resolve to roll up my sleeves and try to help."

There's little doubt in Stephan's mind that the Lyme threat is growing, and health authorities here and else-

where agree. Experts say the range of deer ticks is expanding as deer and mice populations increase, and, as humans push their homes farther into the woods and find more ways to have fun outdoors, their exposure to the ticks increases. Even climate change may prove a factor: Deer ticks thrive in warm, humid conditions, so the warmer and more humid our boreal weather becomes, the friendlier the environment for ticks. In the meantime, increased awareness and diagnoses of the disease add to the rising case numbers.

A human vaccine was briefly available, but the market didn't justify its cost, so if you're outdoors in tick country, DEET is recommended and commonsense precautions are the watchwords. [See page 113.] Nobody, not even the Lyme patients you talk to, advocates staying inside. Stephan's backyard abuts a 700-acre nature preserve, and he and his son are enthusiastic campers. Kemperman, whose job includes dragging canvas tick-catchers through the underbrush during Lyme season, says the key is balancing caution with a "healthy enjoyment of the outdoors." According to Betty Maloney, "None of us is saying, 'Don't go in the woods.'"

"We still live in the woods—and I wouldn't trade that for anything," says Jill Kuschel, who speaks from hard experience about the tradeoffs. "Ticks are a fact of life, and we take precautions, especially in the spring and summer. Before I got sick, I didn't think twice before walking in the woods. I've since become very careful."

Senior editor William Swanson has written about depression, Alzheimer's disease, heart attacks, and other medical subjects in Mpls.St.Paul Magazine.

TICK TALK ONLINE



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