MRSA Bug Killed by Kangen Water 2.5 pH

A DEADLY BUG INVADES OUR TOWNS

by Dr. Ranit Mishori

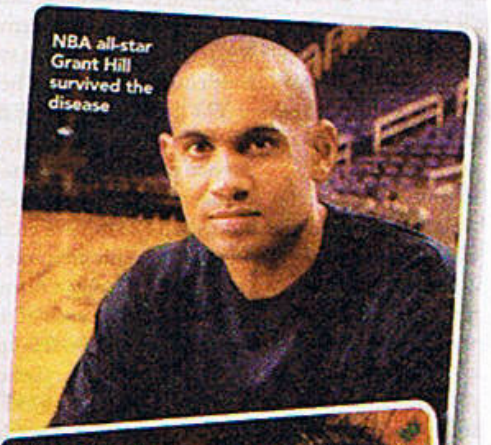
A FEW YEARS AGO, I BEGAN noticing an unusual number of patients coming in with what they described as spider bites. In clinics and emergency rooms across the U.S., colleagues were seeing it, too: Young people and old, male and female, complaining about a skin sore not unlike a pimple, often red and swollen, sometimes oozing and painful. The only thing was, very few of these patients recalled being bitten by a spider or any other kind of insect.

That's because, in most of these cases, it wasn't an insect. But it was a bug—a bacterium called methicillin-resistant Staphylococcus aureus, better known to most of us now as MRSA. These patient complaints were clear signs of what is now a MRSA epidemic.

According to a recent article in the *Journal of the American Medical Association*, MRSA caused more than 94,000 life-threatening infections and nearly 19,000 deaths in the U.S. in 2005. One study in *The New England Journal of Medicine* found MRSA 59% of the time when adults came to emergency rooms with skin infections.

MRSA is not new. It has been plaguing our hospitals for decades. It kills by infecting the blood and lungs of very sick patients or those recovering from surgery. But at least doctors knew—or thought—that if you weren't a hospital patient in weakened condition, MRSA wasn't going to find you.

"That is no longer true," says Dr. Robert Daum, a pediatrician and infectious-diseases specialist at the University of Chicago. "Hospital transmission is not what's driving the epidemic disease we see everywhere." New strains of MRSA have been born outside hospital walls and are finding anybody and everybody. That includes, says Dr. Rachel Gorwitz



NBA all-star Grant Hill survived the disease

Simon Sparrow, left, then 1, with his sister Elena, 4, died of the infection

An infection that resists antibiotics has been finding new victims

of the Centers for Disease Control and Prevention, "otherwise healthy people in the community, including children."

Consider Susan Wagoner, 49, a businesswoman from Scottsdale, Ariz. MRSA first appeared as a small abscess on her upper leg. Even though she was treated with antibiotics, the abscess grew larger, and then another one developed elsewhere. The pain became excruciating. As weeks turned into months, her illness forced Wagoner to quit her job, and she says, "I began looking into funeral arrangements."

Grant Hill, the NBA all-star, contracted MRSA a few years ago as a skin infection near his ankle, and he had to spend a week in the intensive-care unit. "I was lucky to survive," Hill says.

Not so lucky was an 18-month-old in Chicago named Simon Sparrow, in good health before MRSA got into his lungs. Once it took hold there, even the most aggressive treatment could not rescue the toddler.

These new strains of MRSA—not all as deadly as the one that afflicted Simon—are showing up all over the community: in homes, schools, gyms, military bases, prisons, or any place people get in close proximity with each other. They are transmitted through skin-to-skin contact with uncovered infections, such as shaking hands or bumping up in a football game. MRSA also can spread by sharing objects that are contaminated: towels, clothing, and razors. Indeed, the pattern of infection has earned this variant of the bug a new name: CA-MRSA, for community-associated.

The infection usually shows up as a skin sore. At that point, it's generally not life-threatening and can be treated by draining the pus, with or without antibiotics. The only problem is that the antibiotics used for most bacterial infections won't work.

It's the R in MRSA, which stands for "resistant," that tells the story. Just after antibiotics were introduced, tiny organisms—Staphylococcus aureus—became "immune" to our first line of antibiotic drugs. These variants survived, thrived, and spread. "Staph Aureus is a very smart bug," says Dr. Daum. "It figured out every antibiotic we humans have thrown at it and has developed resistance mechanisms to them one by one."

The nightmare scenario is a world in which we don't have a pharmaceutical answer for some of the most common germs making us sick. Our experience with MRSA and other infections suggests we've taken a step or two in that direction. The current epidemic, says Dr. Daum, has put "tremendous pressure on our antibiotic treatment armamentarium."

Still, it is way too soon to panic. In most cases, doctors can find drugs that kill the bug. Some—such as Bactrim, clindamycin, and tetracycline—haven't commonly been used to treat staph infections. There's also a range of superpowerful antibiotics that have been used successfully in hospitals.

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Yes, bugs are smart, and we can't change that. But the resistance of bacteria also stems from human misuse. We all know people who want to take antibiotics even though their infection is likely caused by a virus. Or doctors who prescribe antibiotics just because patients demand them. Or people who use leftover antibiotics given to them by friends and relatives. Or people who fail to finish the entire dose of a prescription, allowing the "toughest" germs to survive and reproduce.

Many experts believe that antibiotics given to animals also contribute to the development of resistance in humans and that the use of antibacterial soaps is another problem.

Just the other day, a patient came to see me with an infection on her chest. When I mentioned MRSA, it scared her. "Is it that bad bug I've heard about?" she asked. I told her "yes" but was able to add, "This is still something we can take care of." The question is, how long will that be true?

HOW TO PROTECT YOURSELF

- Know the signs of MRSA. A staph infection may appear as a boil, bump, or insect bite.
- See your doctor if a skin lesion becomes red, warm to the touch, is filled with pus, painful, or accompanied by a fever.
- Wash your hands regularly. Plain soap and water or alcohol-based gels (with at least 60% alcohol) are enough.
- Do not share personal items, such as towels or razors.
- Cover all cuts and scrapes with a bandage until they heal, especially if the wound oozes pus.