Rat lungworm disease can devastate lives

By Kay Howe

Wednesday, January 13, 2010 9:06 AM HST

I’d been five months in the rainforest in Kalimantan on the island of Borneo working with my Dayak and Melayu friends on an organic farming and wild forest honeybee project when I got the text message: "Graham (McCumber) (my son) is sick. Lyn (my sister) thinks he has rat lung. You might need to come home."

My heart dropped. I had to think for a minute, "What is rat lung?" Then it came to me, oh yes, it’s caused by a parasite that can make you pretty sick, affects the brain and nervous system but usually people recover. Within an hour I had my bags packed and was headed down the river, the first leg of the long trip back to Hawaii. It was two days before Christmas 2008 -- ironically, it was the Year of the Rat.

I arrived on the Big Island on Jan. 2, 10 days before Graham went into a coma from rat lung. We were flown from the Hilo Medical Center to Queens Hospital in Honolulu, where Graham had yet another MRI. The infectious disease specialist at Queens delivered the news that the brain damage was so great that Graham would never recover, perhaps he might open his eyes at some point in time but that was it. My options were to let him go, we would not want him to remain in a body he couldn’t use, or to ask for a miracle. I chose the second although accepted the first if Graham chose to go.

For three months I lived at the Hilo hospital taking care of my son, I never went home until we both went home. During this time he was quadriplegic, had a tracheotomy that ensured his breathing, was being fed through a
stomach tube and was on massive doses of antibiotics for all of the secondary infections that came from being in the hospital. Pneumonia penetrated his left lung, requiring a return to Queens to surgically remove an infection in the chest cavity and the insertion of chest tubes to drain the infection. There were so many tubes coming out of him it was sometimes hard to keep the faith, but this faith was shared by many of his nurses and nurse aides, and by a wonderful woman who became his speech therapist, helping him learn to swallow and open his mouth, which eventually led to him talking and coming out of the coma. We had some wonderful help as well from the realm of alternative medicine and probably half the world was praying for him. The only doctor who believed he could recover was the doctor who did the lung surgery. The whole, remarkable story is too long to tell here but the short of it is that we got the miracle. My son is still with us and he is recovering remarkably.

I dig up these memories and talk about rat lung because I don't want anyone else to go through what we have gone through. Rat lung is here to stay on Hawaii unless all the rats, slugs, snails, flatworms and who knows what other carriers miraculously disappear. Until then we need to educate residents and visitors about rat lung, how to avoid getting it and what the symptoms are if you do get it. Graham still has double vision from the damage done to the nerves that control the eye muscles. He has had to relearn how to do almost everything. His balance is still bad and he can easily fall if someone is not with him. He has more bad days than good days, a tough thing for a 24 year-old who used to surf everyday, skateboard as often, and had a good job as a carpenter and stonemason. He's not the only one who has had rat lung, the numbers in Hawaii, particularly on the Big Island in the Puna District, are much higher than reported and many people we've met still live with pain years later.

There has been recent coverage in Hawaii on rat lung because of the severity of my son's and Silka Straus' case. Silka is the woman from Germany who also went into a coma from rat lung. In a nutshell, rat lung is a disease caused by a parasite, a nematode, that first lives in rats and is transferred to slugs, snails, flatworms, prawns, opiihi, etc. through feces. People usually get rat lung by eating one of the above that have the parasite, or by eating fruits or vegetables contaminated with slug slime, as parasites are released in the slime trail. However we have met people that have gotten it by having a slug crawl into a glass of something they were drinking, releasing the parasites, and we have met people who say they got it from stepping on or handling slugs. We are advised by the health department to wash fruits and vegetables carefully under running water, which is very good advice. I rarely eat salad in Hawaii anymore and cook all vegetables. I know the benefits of raw food but for me it's not worth the risk. The Puna area, where incidents of cases of rat lung are the highest, is a haven for people who are raw food advocates. Be extremely careful if this describes you.

Hawaii needs to acknowledge that this is a bigger problem than they want to admit and get busy on research, education and treatment. We have a state funded university and PBARC to do the research. Queens Hospital is a medical research and teaching facility. I recommend researchers and medical professionals read publications by Professor Pedro Morera, from the School of Medicine and Institute for Health Research, University of Costa Rica. While his studies have been done on Angiostrongylus costaricensis there is much that is applicable and some of us feel there is a strong possibility we have this parasite as well as Angiostrongylus cantonensis. Here is a list of research we would like to see done:

- What can we soak our vegetables and fruits in that will kill the parasite and for how long? As many people use the following, please include testing salt water, vinegar, hydrogen peroxide, grapefruit seed extract, and miracle mineral supplement (MMS or chlorine dioxide).

- What temperature does food need to be cooked to kill parasites?

- Can the parasite pass through skin or open wounds?

- Do mongoose carry the rat lung parasite? In Central/South America the cotton rat is the major host but they have identified 11 additional rodent species, coati, dogs and marmosets that have been infected as well.

- Do we have Angiostrongylus costaricensis as well as A. cantonensis? Many people experience pain and damage to the bowels, indicative of A. costaricensis.

An educational program needs to be designed that educates all medical practitioners in Hawaii so they are aware of rat lung and can properly diagnose it. In our educational outreach we are finding higher numbers of cases of rat lung than are reported. Numbers of cases seem to be low in Hawaii because it is not properly diagnosed or people cannot afford to or do not want to use western medicine. Even if they wanted to use western medicine many doctors tell rat lung patients that there is no treatment and it should resolve itself in 3 weeks. The Center for Disease Control states the same and it is completely erroneous. Doctors must come up with early treatment before
parasites get to brain and do major damage to the nervous system, or, if we do have A. costaricensis, damage the bowels. My sister told ER doctors at Hilo Medical Center that Graham had all the symptoms of rat lung but they told her he had the flu. It took 3 trips to the ER before they admitted him to the hospital and by then he couldn't urinate. The same thing happened to Silka. We all wonder if things might be different if doctors had recognized the symptoms and begun treatment early. There had been patients admitted to the same hospital several years before with rat lung so I would think doctors should have been able to diagnose it. I would also think the doctors who treated Graham in the hospital would be interested in why he is recovering. We have and continue to use many alternative medical treatments that are producing wonderful results, including acupuncture, intravenous vitamin therapy and herbal medicines. We have been proactive from the beginning, which is critical for recovery.

It is also evident that Hawaii must revamp and properly fund its agricultural inspection program. The ratio of inspectors inspecting what's coming into Hawaii compared to the number inspecting what is going to the US mainland is grossly disproportionate. As a result, we now have some really nasty invasive species, (i.e. slugs, little fire ant, veroa mite) which adversely affect peoples' lives and livelihoods and will have far-reaching effects for many generations. Currently, a person can bring any fruit, vegetable, insect, soil etc. into Hawaii they want. No one collects the agricultural inspection cards they give you on the plane and they don't put any carry-on luggage through x-ray machines before you board if you are coming into Hawaii, only if you are flying to the mainland. Inspection of containers now falls under the jurisdiction of the Dept. of Homeland Security. The introduction of these invasive species threatens to undermine the excellent work being done by farmers, educators, non-profits and others to create a food secure and sustainable Hawaii.

It takes the fun out of food when you have to worry that it might make you terribly ill. There have already been 2 suicides from rat lung, the duration and level of pain is that great. Education is key; honesty is key. It's not great for tourism or for selling veggies but you can't pretend it doesn't exist. We've been giving out information on rat lung at local markets and are working with school garden teachers to help students stay safe. We are happy to give informational talks to any entity requesting it and hope more funding will be found so we can keep up our efforts. For more information on rat lung, including scientific research papers, check our Web site at http://www.ratlunghawaii.org, it pays to educate yourself. We are documenting cases of rat lung so if you know or think you've had rat lung we would appreciate you call us at 808 769-2363, or download the form from our Web site and mail it to the address listed at the bottom of the form.

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