



HOSPITAL WOULD LIKE GREATER EXPOSURE FOR MEDICAL TOXICOLOGIST

To a medical toxicologist, the world can be a place fraught with danger emanating from often mysterious and sometimes deadly sources.

These subspecialists are part of a relatively select group – the American College of Medical Toxicology lists fewer than 500 nationwide, including just 23 in Colorado – trained to evaluate, diagnose, treat and prevent adverse health effects caused by medication; exposure to toxins in the residential, occupational and environmental settings; and biological agents.

With the recent addition of Javier Waksman, MD, University of Colorado Hospital now has a medical toxicologist to handle cases in both acute emergency and outpatient settings. Waksman is also an internist in UCH's University Medicine Clinic. Awareness around the hospital of the services he offers, however, is at present relatively low.

A unique clinical role. UCH has two toxicologists on staff to handle acute emergency cases of chemical exposure, drug overdoses and the like. Medical toxicologists, Waksman says, also deal with the adverse health effects of chronic exposure.

The medical toxicologist, he notes, examines patients through a time-consuming process that includes a lengthy history, a physical exam and often a battery of tests. "We are investigators seeking to put the pieces of a puzzle together," Waksman says. "Our job is to show that the symptoms a patient displays match the effects of an exposure to a toxin."

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“Drug interactions are a major cause of adverse effects in patients, but they are sometimes neglected due to a lack of knowledge,” he observes. “As a young attending physician, I realized that there were adverse effects caused by drug interactions. But I also knew I did not have enough knowledge to understand them.”

“The major advantage of being both a toxicologist and an internist,” he points out, “is that we see patients in a broad range [rather than as isolated poisoning cases.] Most toxicologists are PhDs. They can sort out the mechanics of toxicity, but they don’t treat patients.”

Major insurers, including TRICARE and Anthem, Waksman adds, cover his toxicology services, and he is certified by the state workers compensation program to establish impairment ratings associated with chemical exposure. However, the number of referrals he receives through Internal Medicine remains relatively tiny.

“I see one to two cases a week,” he says. “Many people are not yet aware we exist, and that we are under the roof of Internal Medicine here at the hospital.”

High-profile cases. His hospital profile may be low for now, but Waksman has been involved in a number of toxicology cases that attracted attention, including reports of alarmingly high levels of copper and lead in the drinking water at buildings on the Anschutz Medical Campus in 2006.

“I performed evaluations and blood work,” he says, “to determine what the exposure meant.” He did not find any cases in which exposure to the drinking water caused harm.

In the summer of 2006, Waksman provided assistance in Nicaragua and Panama with two separate toxic outbreaks.

The Nicaraguan ministry asked for his help in July of that year after large numbers of people consumed home-brewed liquor tainted with methanol, a substance used in windshield wiper fluid.

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In September, the Pan American Health Organization (PAHO) – part of the World Health Organization – requested Waksman’s assistance with a mass poisoning in Panama caused by cough syrup contaminated with diethylene glycol, a material found in brake fluid, among many other things. He spent a week in the country helping health officials treat patients.

“Dr. Waksman’s remarkable contribution to the establishment of clear clinical protocols for the diagnosis and treatment of the intoxicated victims was described as truly valuable by the medical doctors and Panamanian health authorities,” a PAHO representative wrote in a letter to the American Board of Toxicology.

Waksman stresses that many cases he handles are not so clear-cut. “Many of those I see have no specific symptoms,” he reports. He recalls a group of teachers whom he says were “classified as crazy” for their complaints about the building in which they worked.

“We went back and checked the air quality of the building,” he says, “and found that with proper ventilation, their symptoms improved remarkably.”