Blue Ridge Poison Center's

Tox Talks

Vol. 6, No. 2 February 2008 A Bulletin for Health Care Professionals Who Manage Poisoned Patients http://hsc.virginia.edu/brpc/

Folk Remedies as Sources for Lead

DOES YOUR FACILITY HAVE TELEMEDICINE?

The Blue Ridge Poison Control Center offers CME-accredited toxicology lectures through telemedicine. To request a topic, schedule a lecture for your staff, or more information contact Heather Collier: 434-924-5185 or HLC8E@virginia.edu.

THE UVA CENTER OF CLINICAL TOXICOLOGY associated with the Blue Ridge Poison Center manages over 500 patients each year on site in the University of Virginia Health System - from outpatient clinic visits to critically ill inpatients managed in our pediatric and adult intensive care units. In addition, over 2,000 requests are made each year for consultation with our physicians from other healthcare facilities by phone or telemedicine. Our Boarded Medical Toxicologists are internationally known for the expertise in the care of poisoned patients. Call 1-800-222-1222 24 hours a day, every day. [Cell users: 1-800-451-1428]

http://www.healthsystem.virginia.edu/internet/medtox/cct/ccthome.cfm

IN CHARLOTTESVILLE

Reminder: At University of Virginia Hospital, the first Wednesday of every month features toxicology Grand Rounds. For more information, contact Heather Collier: 434-924-5185 or HLC8E@virginia.edu

Case:

A 6-month-old Hmong girl was found to have lead poisoning (blood lead 60 ug/dl, erythrocyte protoporphyrin 263 ug/dl, hematocrit 38%) during routine screening for well-baby care. She was asymptomatic at the time. Her physical examination was unremarkable. No environmental sources of lead, such as paint, could be identified after a thorough investigation of the family's home. After detailed questioning by the child's pediatrician, the parents admitted giving a remedy called pay-loo-ah that consisted of red and orange powders. Laboratory analysis of the red powder showed a lead concentration of 8%. Believed to have originated in China or Southeast Asia, pay-loo-ah was reported to be given to children as a cure for fever or rash. Samples of folk remedies were obtained from several Hmong households in the community at that time revealed it contained lead (between 1% - 90%). These folk remedies were in wide use and were easily available through local Asian food stores or Hmong peddlers.

Discussion

Pay-loo-ah is one of numerous folk remedies that have been associated with lead poisoning in the United States. Numerous other traditional or folk medications used in East Indian, Indian, Middle Eastern, West Asian, and Hispanic cultures have been found to contain lead. For example, numerous confirmed cases of lead poisoning following the ingestion of azarcon or the related remedy, greta, have been reported throughout the country. Greta and azarcon are fine powders with total lead contents found to vary from 70% to greater than 90%. As powder, they provide a large surface area for potential absorption. These remedies apparently are most often administered to

infants and children for such a variety of complaints, such as colic. In fact, certain branches of ayurvedic medicine consider heavy metals such as lead to be therapeutic and encourage their use in the treatment of certain ailments. Lead is subsequently added to many of the concoctions because of its supposed curative properties. In other cases, folk powders and pills become contaminated with lead from soil or through the manufacturing process. Traditional medicines may account for up to 30 percent of all childhood lead poisoning cases in the United States, according to the Centers for Disease Control and Prevention. The exact prevalence is not known, as only 14 percent of children are tested for lead nationwide.

Health care workers should consider folk remedy use in the differential diagnosis of unexplained lead toxicity. Screening for elevated blood lead levels is necessary to identify cases. The reluctance of family members to report the use of traditional ethnic medicines during initial interviews may reflect factors such as uncertainty about the legality of using such medicines, belief in the effectiveness of these remedies, and concerns regarding responsibility for the child's elevated BLL. In addition, because some persons may not consider these substances to be "remedies" or "medicines," health-care providers and public health investigators should ask about the use of these substances by their common names. Culturally appropriate educational efforts are needed to inform persons of the potential health risks posed by these remedies, particularly in populations in which traditional or folk medication use is prevalent.

Folk Remedy Name	**Region of Origin**	**Purported Medical Indication**
Albayalde	Mexico & Central America	vomiting, colic, apathy, lethargy
Albayaidle	Mexico & Central America	vomiting, colic, apathy, lethargy
Alarcon	Mexico	vomiting, colic, apathy, lethargy
Alkohl	Middle East	topical medical preparation, applied to umbilical stump
Al Murrah	Saudi Arabia	colic, stomach aches, diarrhea
Anzroot	Middle East	gastroenteritis
Azarcon	Mexico	vomiting, colic, apathy, lethargy
Ba Bow Sen	China	Hyperactivity and nightmares in children
Bali goli	Asia/India	stomach ache
Bint al dahab	Oman, Saudi Arabia, India	diarrhea, colic, constipation, and general neonatal use
Bint	Oman, Saudi Arabia, India	diarrhea, colic, constipation, and general neonatal use
Bent dahab	Oman, Saudi Arabia, India	diarrhea, colic, constipation, and general neonatal use
Bokhoor	Saudi Arabia	wood and lead sulfide burned on charcoal to calm infants
Cebagin	Middle East	teething powder
Cordyceps	China	herbal medicine treatment for hypertension, diabetes, bleeding
Deshi Dewa	Asia, India	fertility pill
Farouk	Saudi Arabia	teething powder