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Mary Guinan
University of Nevada, Las Vegas, mary.guinan@unlv.edu

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WOMEN’S HEALTH

PMS and Eosinophilia-myalgia syndrome

Mary E. Guinan, MD, PhD

In November 1989, the Centers for Disease Control reported a cluster of cases of the newly emerging Eosinophilia-myalgia syndrome. First reported from New Mexico and associated with the ingestion of the amino acid L-tryptophan, the number of reported cases has increased to more than 1,000 as of January 1990; they come from every state but Alaska and 84% of cases are in women.

The majority of sufferers have reported arthralgias, cough, shortness of breath, fever, and edema of the extremities. Periorbital edema, sclerodermiform skin changes, alopecia, and neuropathy or neuritis occurred in approximately 20% of cases. Eosinophil counts ranged from 1,000 to 65,000 cells/mm³. Pleural effusions and pulmonary infiltrates were found in 10% of patients who had chest X-rays. Thirty-six percent of patients were hospitalized and seven deaths have been reported, only one of which has been confirmed as directly attributable to the syndrome.

Virtually all patients had ingested L-tryptophan before onset of symptoms. L-tryptophan is marketed as a food supplement in grocery stores and health food establishments as well as drug stores. Despite lack of sound evidence, it has been advocated as a treatment for premenstrual syndrome (PMS) and insomnia. The PMS connection may explain the preponderance of cases in women. L-tryptophan has been touted as a natural antidepressant and hypnotic. So-called natural treatments are very appealing to a large proportion of the population, especially in this health conscious era. For women who suffer from PMS, I imagine that it is particularly appealing because of the lack of a universally accepted treatment for PMS.

Many different PMS treatments have been advocated, including high doses of specific or multiple vitamins, but nothing has been shown effective when studied in appropriate controlled trials. Herein lies the dilemma: What can we do for patients suffering from PMS? Our obligation as physicians is first, to do no harm, but also to minister to our patients' needs. When we recommend unproven treatments, we must determine how effective the treatment is and to ensure that serious side effects occur. Therapy would be discontinued if either the patient saw no improvement or if suspected side effects developed.

What happens when the so-called natural remedies like herbs, food supplements, vitamins, or minerals are advocated by various business establishments? Large chain drug stores, health food establishments, or supermarkets can make huge profits from selling these “natural” remedies for PMS. No provision is made for evaluation or followup for adverse effects. I am always surprised by women who have a healthy skepticism for both physicians and prescribed medications, but who uncritically embrace natural remedies advocated by commercial interests with clear profit motives. Perhaps it is the word “natural” that is appealing and denotes safety to many consumers.

L-tryptophan is an amino acid naturally occurring in many foods. No one knows how widely used it is or what constitutes the average dose. In an analysis of some 400 cases of the Eosinophilia-myalgia syndrome, doses ranged from 26 mg to 18,000 mg per day with a median dosage of 1,500 mg per day. Many of those affected did not relate their symptoms to the L-tryptophan and kept consuming ever larger doses until they became incapacitated and were hospitalized.

Before the epidemic was recognized, many patients did not report the use of the amino acid when describing symptoms because they didn’t consider it a medication. When patients were contacted after the association was made, all stated they had used L-tryptophan and some were still using it.

Whether it is the L-tryptophan itself or some contaminant in the manufacturing process that causes the symptoms is unknown. The symptoms closely resemble toxic oil syndrome, which occurred in epidemic form in Spain in 1981. In that outbreak, the ingredient or contaminant in the cooking oil that caused the symptoms was never established. A link between L-tryptophan and the cooking oil is now being investigated. The Food and Drug Administration has issued a nationwide recall of all L-tryptophan and L-tryptophan containing products.

I wish I could come up with some moral to this tale. What I can do is to alert physicians to the association of L-tryptophan and this new syndrome and to suggest that we ask all our patients about natural remedies as well as medications they may be taking. For women with PMS, I advise caution in what you take whether prescribed by a physician or your local grocer.

References