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TROPIN—RELEASING HORMONE
ONIST IN A GIFT PROGRAM

# Eosinophilia-Myalgia Syndrome Not Associated with L-Tryptophan

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*The author reports a case of eosinophilia-myalgia syndrome (EMS), not associated with the use of tryptophan. Other nutritional supplements should be considered as possible etiologic agents in EMS. Further research in this area is needed.*

Since the initial description of eosinophilia-myalgia syndrome (EMS), reports have been published showing an association with tryptophan ingestion and EMS.[1] A chemical contaminant referred to as "peak-E" and identified as 1,1′-ethylidenebis [tryptophan] has been demonstrated in retail lots of tryptophan consumed by patients with EMS and implicated as the possible causal agent or a marker for an unidentified causal agent.[2] Recently, a patient with biopsy-proved EMS, meeting the Centers for Disease Control (CDC) diagnostic criteria who did not consume tryptophan, but who was consuming lysine in addition to a variety of other vitamins, minerals, supplements, and homeopathic remedies, has been identified.

In 1989, a 33-year-old white female complained of fatigue and dizziness. She was referred to a physician specializing in alternative medicine who diagnosed Lyme disease, chronic candidiasis, and chronic mononucleosis. She was started on an array of supplements and homeopathic remedies including lysine in February 1990. Initial physical examination and laboratory studies, including eosinophil count, were normal. Over the next several months, the patient began to develop myalgias, edema, thickening and induration of the skin, particularly of the distal extremities, and marked blood eosinophilia with counts greater than 1.8 x $10^3/mm^3$. The vitamin therapy was continued and she began to develop marked hardening of the skin associated with disabling flexion contractures of the elbow, fingers, and ankles. One year after initiation of this therapy, the author evaluated the patient. Full thickness skin, muscle, fascia, subcutaneous tissue, and lymph node biopsies were obtained and revealed changes typical of EMS with muscle atrophy, as well as eosinophilic and lymphocytic infiltration (Figure). The patient was advised to discontinue immediately the vitaman therapy and within one week her skin began to soften. The patient was referred to a major university medical center with experience in the diagnosis and treatment of EMS; the diagnosis was confirmed. High-dose prednisone therapy was initiated with a good response.

This case is of particular interest because it was not as-

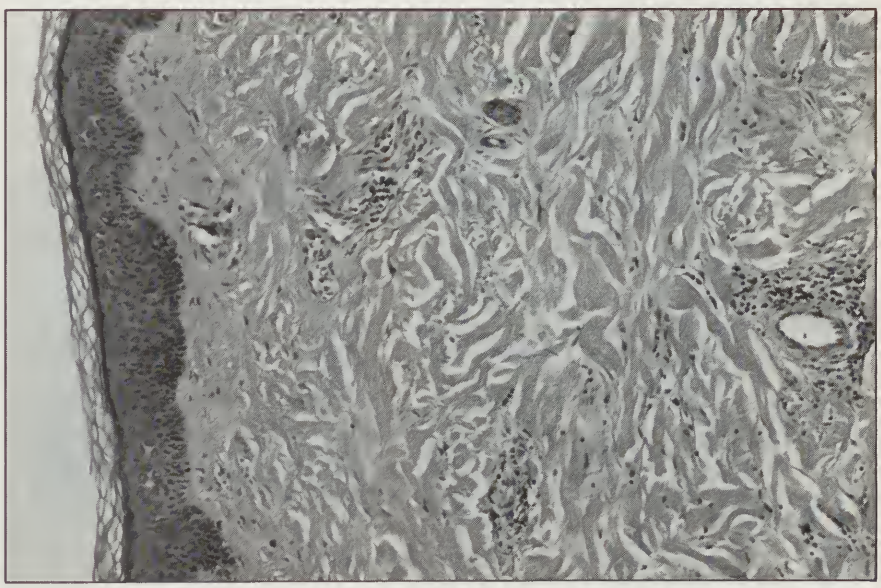

**Figure.** Biopsy of skin and subcutaneous tissue demonstrating changes typical of EMS. Photograph prepared by Ramesh Mahapatro, MD, Pathology Department, Community Medical Center, Toms River.

sociated with the use of tryptophan. Approximately 3 percent of patients with EMS have not utilized tryptophan and the causative agent remains a mystery though lysine has been suspected in three other cases. This case suggests that EMS can be associated with supplements other than tryptophan. Clearly, further research in this area is needed in addition to greater regulation of alternative medicine and appropriate vitamin and mineral supplementation. ■

**Reviewer's comment.** Doctor Patmas's case report emphasizes the pressing need for the establishment of a more rigorous set of regulations in the dispensing of nutritional supplements. The tocsin is sounded especially for the geriatric population, 23 million of whom are enthusiastically consuming nutritional supplements.

Mr. William Barnhill, an investigative reporter, stated that an appraisal by the Federal Drug Administration (FDA) placed current sales at more than $6 billion yearly, a 12-fold increase since 1972 (*AARP Bulletin* 32:12, 1991). He further added that a survey completed by the FDA revealed 66 to 72 percent of persons 65 or over were using supplements in potentially toxic doses. The article decried the compounding of the problem by physicians with inadequate backgrounds in nutrition.

Currently, a task force of the FDA is addressing the problem with proposals for tough new labeling requirements including warnings. A perusal of Mr. Barnhill's article is recommended. □ P.A. Ruggieri, MD

## REFERENCES


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