

# Résumé

## **Eosinophilia-myalgia syndrome induced by L-5 hydroxytryptophane : about 3 cases.**

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### Introduction

L-5-hydroxytryptophane is a pro-drug of serotonin that cross the blood-brain barrier. It is structurally similar to tryptophane. Eosinophilia-Myalgia Syndrome (EMS) has been firstly described with tryptophane. We describe here three cases of EMS potentially induced by L-5-hydroxytryptophane reported between 2001 and 2012.

### Observations

The first case concerns a 52-year-old woman, treated with L-5-hydroxytryptophane for 3 years when she presented scleroderma associated to pruritis. L-5-hydroxytryptophane was stopped and corticosteroids were started. The scleroderma responds well to corticosteroids. Two years later, just a few lesions persisted.

The second case concerns a 57-year-old woman treated with L-5-hydroxytryptophane for one year when she presented joint pain, muscle weakness in the four limbs associated to general state altered and loss of weight. Approximately one year later, she presented cutaneous infiltrates and a fasciitis. Eosinophilia and inflammatory syndrome were associated. L-5-hydroxytryptophane was stopped and corticosteroids were

added. She regained weight, her fatigue improved. But the role of L-5-hydroxytryptophane remained unclear and a possible auto-immune etiologia was suspected.

The third case concerns a 50-year-old man treated with L-5-hydroxytryptophane for four years when he presented diffuse myalgia associated to progressive scleroderma and eosinophilia. L-5-hydroxytryptophane was stopped but the evolution remains unknown for the moment.

## Discussion

No case of EMS due to L-5 hydroxytryptophane is found in the literature. In 1989, an outbreak of EMS happened in the USA in patients treated with tryptophane. Over 1500 cases were known and 2 to 6% of them died. EMS associates myalgia, muscular weakness, fatigue, joint pain, scleroderma like skin ... Symptoms usually appear after a few years of treatment. An improvement is generally noted when tryptophane is stopped. One hypothesis for this outbreak was the presence of a contaminant since the syndrome appeared to be associated with tryptophane from one manufacturer. Actually, a second hypothesis based on the pharmacodynamic properties of tryptophane is evocated and concerns a metabolite that affects the degradation of histamine.

In conclusion, despite the lack of bibliography concerning L-5 hydroxytryptophane, we can not rule out its responsibility in the occurrence of EMS.

Inflamm Res. 2005 ;54:435-50.

J Clin Epidemiol. 1995 ;48:1413-27

Toxicol Lett. 2004 ;150:111-22

[http://www.atout-org.com/p2t2013/abstract\\_display!fr!!!!487a1a72-7fab-1030-b866-9251dd645b9d!bc9884ec-d673-1030-b866-9251dd645b9d](http://www.atout-org.com/p2t2013/abstract_display!fr!!!!487a1a72-7fab-1030-b866-9251dd645b9d!bc9884ec-d673-1030-b866-9251dd645b9d)