

**TITLE 1:** "Ask the Doctor"

**TITLE 2:**

**DATE:** August 1998

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**KEYWORDS:**

- Awareness

**ABSTRACT OVERVIEW:** One reader asks a question about the association between RLS and the immune system.

**COPY OF ARTICLE:**

**Ask the Doctor**

**Q.** *My RLS symptoms seem to be associated with a variety of chemical that might cause allergies or altered body metabolism. Can various toxins cause RLS? What is known about the relationship between RLS and the immune system?*



**A.** You stand that your RLS symptoms are associated with a variety of chemicals that cause allergies or alter metabolism. Unfortunately, you did not specify what these chemicals are. Yes, various exogenous chemicals can affect RLS symptoms. For example, drugs such as lithium, tricyclic antidepressants and caffeine are known to aggravate RLS symptoms. The so-called uremic toxin (we do not know the exact nature of this toxin) may be responsible for RLS symptoms in uremia (chronic kidney failure). Altered metabolism as a result of iron or folic acid deficiency is, of course, well known to aggravate or possibly be associated with RLS symptoms. I am certain there are other metabolic factors that may either aggravate or be associated with RLS symptoms but, at present, we do not know the nature of these factors.

The relationship between RLS and the immune system is not clearly known. It is possible that RLS may be associated with some unknown immunologic disturbance. It has been reported that RLS symptoms may be present in about 30% of patients with rheumatoid arthritis, which is a well-known autoimmune disorder. The problem we are all facing to ascribe RLS to an immunologic disorder is the fact that very little is known about the relationship between the immune system and sleep. We are just beginning to explore this subject. It is believed that sleep is essential for proper functioning of the immune system. The central nervous pathways controlling sleep and wakefulness may also impact upon the immune system. I am certain that in the course of the next few years, we will know a great deal about the role of the immune system and sleep, at which time we will be in a better position to understand the role of the immune system, if any, in RLS symptoms.

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