

TITLE 1: “Ask the Doctors”

TITLE 2:

DATE: February 1999

AUTHOR/S: Richard P. Allen, PhD

KEYWORDS:

- Pharmaceutical treatment
- Sleep

ABSTRACT OVERVIEW: Dr. Allen discusses Klonopin, a benzodiazepine, one of the sedative-hypnotics or sleeping pills that have been found to provide relief for the sleep disturbances of RLS.

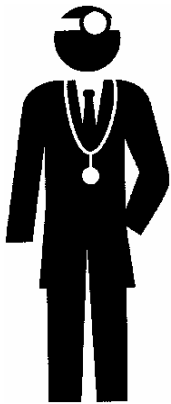
COPY OF ARTICLE:

Q. *I take Klonopin. At our last support group meeting, a physician told our group that development of tolerance is a common occurrence with this drug, and one must then go to higher doses for effective therapy.*

On the other hand, Klonopin is known to be addictive. During the three nights I forgot to take my pill I awoke feeling strange and not well. Should one indeed go to higher doses of Klonopin and thereby become ever more dependent on it? If a rotation of drugs is desirable, should one do this at the low dose level, when leaving the drug will cause the least distress?

A. Klonopin, a benzodiazepine, is one of the sedative-hypnotics or sleeping pills that have been found to provide relief for the sleep disturbances of RLS. The generic name for Klonopin is clonazepam. It is usually given in 0.5-mg tablets taken about 30 minutes before bedtime.

The usual dose for RLS is 1 to 2 tablets before sleep. It appears to provide better sleep for milder cases of RLS. It has not been reported to benefit any of the restless legs symptoms occurring when the patient is awake.



One controlled study found that even high doses (4 mg per day) failed to provide significant reduction in daytime RLS symptoms. Klonopin benefits sleep primarily by improving sleep efficiency, although it may also slightly reduce the PLMS. The reduction in PLMS is small and has not been found in all studies. It is unlikely to be clinically significant.

In contrast, improved sleep efficiency has been consistently reported. These studies involved mostly patients with PLMS. It has been assumed that Klonopin will similarly improve sleep for RLS patients who have PLMS. RLS patients, therefore, should use Klonopin as a sedative-hypnotic or sleeping pill. It acts for a long time in the brain. A dose

before bed often causes some sleepiness the next day.

Like with the use of all other similar sleeping pills, there are potential problems with tolerance and dependence. Long-term use of these medications, therefore, must be carefully monitored.

Sometimes when starting treatment a dose needs to be increased until symptom relief has been clearly established. Increasing the dose further to keep symptom benefits could occur because the RLS has become worse. RLS severity progresses slowly for many patients. But the increased dose then should occur very slowly with changes only every few years. A need for more rapid dose increases usually indicates tolerance has

developed. Further dose increases then lead to more tolerance. Eventually the dose may get too high and there are significant problems with stopping the medication. Dependence occurs when the medication is needed to obtain good sleep.

If dependence has developed, the sleep disturbance is worse after stopping the medication than it had been before starting the medication. Sometimes this dependence problem is even shown by an entirely new sleep problem developing during medication withdrawal. To avoid these problems, the generally accepted practice is to keep the dose low and not allow it to be gradually increased.

So, in general, do not increase the dose. Consider instead an alternative treatment. Remember this medication is being given mainly to help sleep, it does not specifically treat RLS itself. A treatment more specific for RLS may be appropriate. There are also several other sleeping pills like this one. In fact when any of these have been tested with PLMS, they have generally shown the same benefit for improved sleep shown for Klonopin.

Since it is only the improved sleep that is the clinical benefit from these medications, it is likely that they will all be about equally effective. Some of the others cause less sleepiness the next day. But again, none of them will be as effective as a medicine that specifically treats the RLS condition. The sleeping pills simply help you sleep despite having the symptoms.

Richard P. Allen, PhD

Johns Hopkins University Medical Ctr