

Supplementary Online Content

Tannenbaum C, Martin P, Tamblyn R, Benedetti A, Ahmed S. Reduction of inappropriate benzodiazepine prescriptions among older adults through direct patient education: the EMPOWER cluster randomized trial. *JAMA Intern Med*. Published online April 14, 2014. doi:10.1001/jamainternmed.2014.949

eAppendix. You May Be at Risk: You Are Currently Taking Ativan® (Lorazepam). (Reprinted with permission. All rights reserved. Copyright © 2014 by Cara Tannenbaum and Institut Universitaire de Gériatrie de Montréal.)

This supplementary material has been provided by the authors to give readers additional information about their work

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You May Be at Risk.



You are currently taking
Ativan[®] (Lorazepam)

TEST YOUR KNOWLEDGE

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1. Ativan[®] is a mild tranquilizer that is safe when taken for long periods of time.

True False

2. The dose of Ativan[®] that I am taking causes no side effects.

True False

3. Without Ativan[®] I will be unable to sleep or will experience unwanted anxiety.

True False

4. Ativan[®] is the best available option to treat my symptoms.

True False

(Answers are found on the next page.)



ANSWERS

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1. **FALSE.** It is not recommended to take Ativan for longer than 2 to 4 weeks. People who take it for longer periods of time are putting themselves at a :
 - 5 times more at risk of memory and concentration problems
 - 4 times increased risk of daytime fatigue
 - 2 times increased risk of falls and fractures (hip, wrist)
 - 2 times increased risk of having a motor vehicle accident while driving
 - Problems with urine loss
2. **FALSE.** Even if you think that you have no side effects and even if you take only a small dose, your brain performance is worse and your reflexes are slower.
3. **TRUE.** Your body has probably developed a physical addiction to Ativan[®]. If you stop it abruptly, you would have trouble sleeping and feel greater anxiety. Millions of people have succeeded in slowly cutting this drug out of their lives and found alternatives that help their problem.
4. **FALSE.** Although it is effective over the short term, studies show that Ativan[®] is not the best long-term treatment for your anxiety or insomnia. It only covers up the symptoms without actually solving the problem. Please keep on reading to learn more about developing healthier sleep patterns and diminishing stress.

SO ASK YOURSELF...yes or no?

...HAVE YOU BEEN TAKING **ATIVAN®** FOR MORE THAN 4 WEEKS?

...ARE YOU STILL TIRED AND OFTEN GROGGY DURING THE DAY?

...DO YOU EVER FEEL HUNGOVER IN THE MORNING, EVEN THOUGH YOU HAVE NOT BEEN DRINKING?

...DO YOU EVER HAVE PROBLEMS WITH YOUR MEMORY OR YOUR BALANCE?



AS YOU AGE...

Age related changes take place in your body and change the way you process medications. Your chances of taking more than one pharmaceutical increase, as well as the possibility of a history of illness. Drugs stay in your body longer and lowered liver function and less blood flow to your kidneys may increase side effects.

Unfortunately this is important information that is often not passed on to patients who are taking this drug. Please consult your physician or pharmacist to discuss this further. New drugs are now on the market and could relieve your anxiety or improve your sleep with less side effects on your quality of life .

DID YOU KNOW?

Ativan[®] is in a family of drugs called **benzodiazepines** that is highly addictive and can cause many side effects. Except in special circumstances, it should not be taken for more than 4 weeks.

These drugs remain longer and longer in your body as you age. This means that they can stay for up to several days and could be making you tired, weak, impair your balance, and reduce your other senses.

Ativan[®] can also be associated with hip fractures, memory problems, and involuntary urine loss. Its sedative properties can cause you to be drowsy during the day which can result in car accidents and sleep walking. Even if you are not experiencing these symptoms, be sure to speak to your doctor or pharmacist so that you do not develop them in the future. New drugs are now on the market and could relieve your anxiety or improve your sleep with less side effects on your quality of life.

**Please Consult your Doctor or Pharmacist
Before Stopping Any Medication.**

ALTERNATIVES

If you are taking Ativan[®] to help you sleep...

There are lifestyle changes that can help, in certain situations, instead of taking Ativan[®].

- ✓ **Do not read in bed. Do so** in a chair or on your couch.
- ✓ **Try to get up in the morning and go to bed at night at the same time every day.**
- ✓ **Before going to bed, practice deep breathing or relaxation exercises.**
- ✓ **Get exercise during the day, but not during the last three hours before you go to bed.**
- ✓ **Avoid consuming nicotine, caffeine and alcohol.**

If you do wake up for more than 30 minutes, try getting out of bed and doing a relaxing activity, like reading, listening to soft music, etc. Return to bed when you feel tired again.

If you are taking Ativan[®] to help your anxiety...

There are other solutions to deal with your stress and anxiety.

- ✓ Talking to a therapist is a good way to help you work out stressful situations and talk about what makes you anxious.
- ✓ Support groups help to relieve your stress and make you feel you are not alone in your situation.
- ✓ Try new relaxation techniques like stretching, yoga or tai chi that can help relieve you of everyday stress and help you work through your anxiety.
- ✓ Talk to your doctor about other anti-anxiety medications that have less serious side effects.

Mrs. Robinson's story

"I am 65 years old and took Ativan[®] for 10 years. A few months ago, I fell in the middle of the night on my way to the bathroom and had to go to the hospital. I was lucky and, except for some bruises, I did not hurt myself. I read that Ativan[®] puts me at risk for falls. I did not know if I could live without Ativan[®] as I always have trouble falling asleep and sometimes wake up in the middle of the night.

I spoke to my doctor who told me that my body needs less sleep at my age – 6 hours of sleep per night is enough. That's when I decided to try weaning off Ativan[®]. I spoke to my pharmacist who suggested I follow the step-by-step weaning program (on the next page).

I also applied some new sleeping habits I had discussed with my doctor. First I stopped exercising before bed; then I stopped reading in bed, and finally, I got out of bed every morning at the same time whether or not I had a good night's sleep.

I managed to get off Ativan[®]. I now realize that for the past 10 years I had not been living fully. Stopping Ativan[®] has lifted a veil, like I had been semi-sleeping my life. I have more energy and I don't have so many ups and downs anymore. I am more alert: I don't always sleep well at night, but I don't feel as groggy in the morning. It was my decision! I am so proud of what I have accomplished. If I can do it, so can you! "

STEP-BY-STEP WEANING PROGRAM

We recommend that you follow this program under the supervision of your doctor or pharmacist.¹⁶

Weeks	Weaning Schedule							✓
	Mon	Tues	Wed	Thurs	Fri	Sat	Sun	
1 and 2	●	●	●	●	●	◐	●	
3 and 4	●	◐	●	◐	●	◐	●	
5 and 6	◐	◐	◐	◐	◐	◐	◐	
7 and 8	◐	◐	◐	◐	◐	◑	◐	
9 and 10	◐	◑	◐	◑	◐	◑	◐	
11 and 12	◑	◑	◑	◑	◑	◑	◑	
13 and 14	◑	◑	◑	◑	◑	○	◑	
15 and 16	◑	○	◑	○	◑	○	◑	
17 and 18	◑	○	○	◑	○	○	◑	
19	○	○	○	◑	○	○	○	
20	○	○	○	○	○	◑	○	
21	○	○	○	○	○	○	◑	
22	○	○	○	○	○	○	○	

Legend

● Full dose ◐ Half dose ◑ Quarter of a dose ○ No dose