

Aging Well with Muscular Dystrophy: Sleep Problems and Medications

By researchers at the University of Washington's Aging Rehabilitation Research and Training Center

In our last column, we discussed a number of factors that can cause sleep problems, such as pain and different types of medications. In this column, we will look more in-depth about ways that medications can disrupt sleep patterns, and how to resolve these issues. As with any issues or questions you may have related to your medications, your doctor should be the first person you talk with. Pharmacists can also be excellent resources for information about medications.

Sedatives or benzodiazepines

A class of sedative medications that are sometimes prescribed for sleep are called benzodiazepines. Examples of these medications include Valium®, Xanax®, Klonopin®, Seresta®, and Restoril®. These drugs are often prescribed for insomnia (difficulty falling asleep). But these medications can actually have a negative impact on sleep by inhibiting REM (rapid eye-movement) sleep. REM sleep is an important stage of the sleep cycle. REM contributes to healthy functioning of the brain and psychological well-being. A second negative effect of these medications is that people can become dependent on their medication to fall asleep. Dependency can lead to the body building tolerance to the medication and requiring larger doses to get an effect.

Individuals aging with a disability may experience other negative physical and psychological side effects from long-term use of sedatives or benzodiazepines. For these reasons, benzodiazepines are usually not recommended as a long-term solution to chronic sleep problems. However, it is *very* important to understand that abruptly discontinuing benzodiazepines can be very dangerous. Going “cold turkey” or stopping these medications quickly can cause severe problems. If you are taking medications that fall into this category, talk to your doctor about how to slowly and safely adjust them for your long-term benefit. Changes to these medications may include tapering them until you no longer take them at all.

There has been a lot of research studies over the years on how benzodiazepines affect sleep, some studies going all the way back to 1968. This research includes how the medications act in the body, what side effects they cause, and what kinds of interactions may affect people who take them. The most recent research has focused on how people should taper off benzodiazepines. Some evidence has shown that melatonin (a hormone that regulates sleep and wake cycles) may be negatively affected by benzodiazepine drugs. Increasing melatonin levels may help people taper off benzodiazepines safely. Talk to your doctor if you're interested in learning more about melatonin and how it could possibly help tapering off benzodiazepines.

Other sedatives

A very commonly prescribed sleep medication that is similar to the benzodiazepine class of medication is Ambien®. This medication (also called zolpidem) binds to receptors at the same location as benzodiazepines. Its effects are also similar to benzodiazepines, but it is chemically different. Like benzodiazepines, this medication is not recommended as a long term solution for sleep problems. Long

term use can lead to tolerance (requiring more drug to get a similar effect), dependence, and withdrawal when discontinued. Tapering to reduce or stop the medication is necessary. Some research shows that aging people are more sensitive to the effects of the drug.

Another commonly prescribed medication, Lunesta® (or eszopiclone) also acts like benzodiazepines. It can be helpful for short term relief from sleep problems but can lead to dependence and withdrawal over the long term. Like all medications, it's important to talk to your doctor before you start or stop Ambien® or Lunesta®.

Antidepressants

A class of drugs called “antidepressants” can also help people fall asleep. Examples of antidepressants are Trazodone®, Amitriptyline®, Paxil® and Zoloft®. These medications help to restore a healthy sleep cycle, including both REM sleep and deep sleep. These positive effects occur even when taking these medicines at doses lower than normally given to treat depression. As mentioned before, REM sleep contributes to healthy functioning of the brain and is restorative psychologically. Deep sleep (also known as “stage 3” and “stage 4” sleep) is a stage of sleep that is different than REM sleep. Deep sleep is restorative physically and contributes to healthy muscles and other body parts. Antidepressants impact deep sleep according to research. Although these medications may shorten REM time, research suggests the positive effects of these medications on deep sleep outweigh the reduced REM sleep for people with sleep problems. These types of medications may also help with sleep disorders such as sleep terrors. Talk to your doctor if you're interested in taking this class of medications for sleep *even if you do not have depression*. It is important to note, however, that some disorders (such as restless legs syndrome and REM sleep behavior disorder) may be negatively affected by antidepressants.

Allergy medications or anti-histamines

Some people use another class of medication to help with sleep: allergy medications or anti-histamines. These medicines work to cause drowsiness because they counteract certain chemicals (histamines) in the central nervous system. Some people find that these medications can help them fall asleep sometimes, but they are not recommended to be used as regular sleep medication. And even if used occasionally, all over the counter medications should be taken strictly according to the package guidelines. If you're having sleep problems and have been thinking about taking allergy medicines to help, it would be a very good idea to talk with your doctor or pharmacist about your sleep problems. They can talk to you about the benefits and costs of using these medications (or any other medication) to help. Your doctor or pharmacist will be able to give you more information on how to address sleep problems, and can advise on over the counter medications that may help and that won't interact with anything you're currently taking. For example, antihistamines may not be safe to use if you have glaucoma, heart problems, or an enlarged prostate.

Summary

There is a lot of advice out there about how to get better sleep, and there are a number of medications that may help you do just that. It is important to remember to be careful about what medication to take

for sleep, and to know the costs and benefits of each type of medication. We cannot emphasize enough that, for your health and safety, it is of utmost importance to always talk with your doctor if you're thinking about starting, stopping, or changing any medications.

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