

## Sleep problem may worsen pain condition

### What is normal sleep?

Scientists have yet to unravel all the mysteries of sleep. We know it is essential to a full, healthy life. It is the time when our bodies perform functions such as repairing damaged tissues, fighting off infections and processing of information. This may be important for learning and memory.

### What are the stages, why are they important?



Sleep is a continuous but ever changing process that can be divided up into different stages. Stage 1 is the light, early part of sleep. We can be awoken very easily from this stage. It is not very useful or helpful for the body. Stage 2 is a little deeper. We usually spend up to 50% of our total sleep time in this stage. This is still not the most restorative, beneficial sleep. Stage 3 and Stage 4 are now generally combined into what is referred to as Slow Wave sleep (SWS). Although shorter in duration, these are the most important stages of sleep in terms of body repair. This SWS sleep is deep and is hardest to wake up from. The last stage of sleep is called REM (Rapid Eye Movement) and plays an essential role in processing information we experienced during the previous day.

### What goes wrong in a pain patient's sleep?

The great majority of patients with chronic pain in my practice do not sleep well. When questioned further, most will reported that they did not sleep well even before their pain problems began, but the problem did not have as negative an impact on their lives. Once their pain condition developed, lack of deep, restorative sleep became an important part of why they did not heal as expected. Fatigue causes further problems coping, leading to a worsening of their pain condition. This downward spiral is one of the reasons why chronic pain is such a difficult condition to live with and try to treat.

### What do sleep doctors typically find when they study are the typical deficits in pain patients?

Pain patients can have difficulty falling asleep and/or staying asleep (called: initiating and maintaining sleep). Many types of pain conditions make it difficult to find a comfortable position. Simply rolling over in bed can be excruciating for patients with arthritis, polyneuropathy (from diabetes for example), chronic back pain or fibromyalgia.

Once asleep, brief episodes of partially waking from sleep (called “arousals”) occur frequently in pain patients. The usual causes are respiratory problems, abnormal leg movements and spontaneous arousals that are difficult to explain. Alpha intrusions are also seen more frequently in pain patients. A Sleep specialist I know calls these “a doorway between wake and sleep”.

### **Why are they important?**

Anything that interferes with the normal sleep pattern, especially the Slow Wave Sleep, (stages 3 and 4), will interfere in the body’s ability to heal itself from the damage of everyday living. This repair process is vital for us to function to the best of our ability.

### **What can we do about them?**

Treating the pain condition properly, especially in the early stages is crucial. Allowing sufficient time for rehabilitation, insuring we have proper nutrition, maintaining the proper balance of stress and relaxation will go a long way towards healing.

Knowing we have a sleep problem or detecting it early will help as well. We all should be waking up most mornings feeling refreshed and restored looking forward to the day ahead.

### **Why are typical sleeping pills so bad?**

Most of the time, the primary response to a sleep problem is to ask our doctor for “something to help me sleep”. The usual response to this request is to prescribe something from the benzodiazepam family of medications including (common examples: lorazepam, nitrazepam and diazepam). This class of medications actually reduces the vital Slow Wave Sleep necessary for healing in favour of Stage 2 sleep.



To a patient taking these medications it feels as if they are sleeping deeper instead of tossing and turning, but over a few days to weeks the patient will realize they are not waking up feeling refreshed in the mornings. By then it may be too late.

Stopping these medications after only a few weeks of use can result in withdrawal symptoms, reinforcing their use and leading to a psychological dependency.

## **What is sleep hygiene?**

Sleep hygiene is the name of a set of suggestions we have for establishing good daily habits around the ritual of going to sleep. (Note: See next E-mail.) This is crucial to resetting the brain's sleep pattern and getting back to a normal night's sleep.

## **What is a better choice of medicine?**



There are newer medications, which while not perfect, can interfere less in the normal sleep cycle, especially if used sporadically. Proper treatment of pain is essential. Many people use short-acting pain killers (some loaded with caffeine!) to dull the pain and get to sleep. The problem is that these medications wear off in 2-4 hours, with an abrupt flare-up in pain and a mini withdrawal as well. This leads to an arousal from whatever sleep stage was achieved.

## **What about other options?**

Complementary supplements such as 5-HTP, melatonin and L-tryptophan (prescription required) can enhance the brain's ability to make its own sleep messengers and pain killers helping to restore the normal sleep cycle. It is best to consult your doctor and pain specialist to determine which treatment is most suitable.

For more information contact the Headache & Pain Relief Centre 416.493.9762 or email [info@headachepainreliefcentre.ca](mailto:info@headachepainreliefcentre.ca)