**What is shift work sleep disorder and how to prevent it?**

Based on the name, you can guess that it is the violation of sleep occurring in individuals who work night shifts alternated with daytime or morning shifts. Shift work sleep disorder (SWSD) is a violation of circadian rhythm, i.e. our “inbuilt clock”.

The two main symptoms are trouble falling asleep and excessive sleepiness.

The disorder is unlikely to develop if you have, say, 2 night shifts a month. But the more night shifts you have and the more they alternate with day shifts, the higher is the risk of SWSD.

The thing is that our natural clock naturally makes us awake and alert during the day and signals us to become sleepy and prepare to sleep when it’s getting dark outside. With the occurrence of electricity, the hours that we stay awake shifted drastically so basically almost anyone has a degree of a sleep disorder. But irregular work shifts can aggravate the situation substantially.

When individuals have night shifts for a long time, they are at elevated risk of sleep disturbance and a number of somatic diseases, atherosclerosis, excess weight, metabolic disorders of carbohydrates, etc. As for excess weight, it is due to the fact that insulin secretion in the body changes. It is this hormone that is responsible for the feeling of hunger. If a person is awake at night, he wants to eat. In addition, with this regimen, the amount of cortisol, the stress hormone, elevates, so the body is chronically stressed. At the same time, the level of serotonin is reduced, which provokes irritability and even depression.

The enzyme system of the gastrointestinal tract also suffers. Normally, during the day, there is a maximum secretion of gastric and pancreatic juices, because we are active and eat; their secretion is significantly reduced at night. In a person who is awake at night and consumes food, an imbalance in the production of enzymes occurs, which can lead to diseases of the gastrointestinal tract. For the same reasons, the so-called “traveler’s diarrhea” develops when we change several time zones. The body does not have time to rebuild under a new mode of functioning.

Once again, naturally, people are meant daily activity. We must sleep at night. Of course, if you work on a shift schedule for several months (up to a year), and then return to a normal rhythm, there is a chance to avoid the detrimental consequences. But, when it comes to years, be prepared for health problems. Also, I would not forget that at night due to drowsiness, the concentration of attention inevitably decreases, which means that the probability of making a mistake automatically increases.

**How is SWSD diagnosed?**

If you work night shifts and think that you are excessively sleepy during the day, need naps, have microsleeps (from fractions of a second to several seconds), cannot easily fall asleep, experience general problem focusing, your thinking acuity diminished and you generally feel tired most of the time, it is time for you to go to a doctor and get diagnosed.

The problem can be in SWSD only or you may have developed the accompanied additions such as insulin resistance, diabetes, depression, and others. First, you can go to a general practitioner and get the basic tests done such as blood tests, blood tension measurement, and so on. And if there are no signs of a physical ailment, you can visit a psychotherapist or somnologist (sleep disorders specialist) and get tested for SWSD.

The diagnosis is based on the patient’s survey and actigraphy, a test for monitoring human rest/activity cycles based on the data collected from the sensor worn for a week or more to assess gross motor activity.

**You most certainly have SWSD in:**

- Persistent (for more than 3 months) daytime sleepiness, insomnia, and microsleeps.

- Actigraphy shows that circadian and sleep-time misalignment for 14 days.

- The symptoms presence interferes with social, working, and other areas of life. There is no underlying disease or neurological disorder diagnosed that can explain these symptoms.

**How is SWSD treated?**

Naturally, it is best to get rid of the cause of the disorder, i.e. stop working night shifts. If it is impossible, you can ask your doctor to prescribe you, Modafinil-based wakefulness-promoting agents, to stay fully alert during the night shifts and sleeping pills for facilitated sleep. Modafinil is the safest stimulant available today designed for narcolepsy but also approved for SWSD. It is even used off-label for cognitive function enhancement and for wakefulness promotion by healthy individuals. You should not worry about its side effects as long as you follow the instruction and do not overdose because the drug is intended and had been tested for long-term use.

Besides, here are the tips that you should consider implementing:

1. Try not having several night shifts in a row.

2. Avoid frequently alternating shifts.

3. Consider moving closer to your work so you could spend less time on commuting and more sleeping.

4. One hour before the sleep turn of any screens and bright lights they prevent melatonin production and make it more difficult to fall asleep.

5. Use blackout blinds or heavy curtains to prevent sunlight from entering your room when you sleep during the day. Sunlight regulates our circadian rhythms and will “tell” you to wake up so to get quality sleep, you need to block it from your bedroom.

6. Eat healthily and exercise. You may have not the healthiest working hours but to help your body staying healthy you still need to try eating as clean as possible and exercise at least 30 minutes thrice a week.

7. Limit coffee consumption. It is better to use Modafinil one hour before the shift than drink coffee it will provide more even effect without sharp spikes of vigor with following rebound sleepiness. If you don’t want to refuse it, try not having it at the end of your shift or you will suffer from insomnia.