# A GUIDE TO SLEEP MANAGEMENT STRATEGIES



# HOW DO PITUITARY CONDITIONS AFFECT SLEEP?

Pituitary conditions can significantly impact sleep patterns and quality. People with pituitary disorders often experience disturbed sleep, which may persist even after successful treatment of the underlying condition.

#### Common sleep problems associated with pituitary conditions include:

- disturbance to the circadian rhythm the 24-hour internal clock that regulates sleep
- sleep fragmentation (repetitive short interruptions of sleep)
- insomnia (difficulty falling asleep or staying asleep)
- changed sleep patterns
- obstructive sleep apnoea (OSA) when breathing stops and starts during sleep
- taking longer to fall asleep.

## CAN TREATMENT FOR PITUITARY CONDITIONS AFFECT SLEEP?

Sometimes treatment of pituitary conditions can impact sleep.

For example, surgery or radiation therapy for pituitary tumours may damage the hypothalamus or affect hormone levels, leading to ongoing sleep issues. Hormone replacement therapies, particularly glucocorticoid replacement, can also influence sleep if not timed properly.

The aim of steroid replacement is to mimic the body's normal fluctuations of cortisol levels that happen during the day. People who don't need steroid replacement therapy naturally have very low cortisol levels at midnight that increase during the night, peak in the morning and decline slowly during the day. Taking glucocorticoid replacement late in the afternoon will lead to elevated cortisol levels at night which can interfere with sleep.

# HOW DOES SLEEP IMPACT HEALTH?

Sleep disturbances can significantly impact quality of life. Poor sleep is related to increased risks of chronic conditions such as high blood pressure, heart disease, type 2 diabetes, stroke and poor mental health.

Not getting enough sleep can also affect your ability to concentrate and remember things, make decisions, your productivity levels, and slow down your reaction times.

However, there are some strategies that can help you get better sleep

# **TIPS TO IMPROVE SLEEP**

#### Work with your doctor

Work closely with your doctor and follow your treatment plan. The right treatment may help reduce the impact your condition has on your sleep patterns. You may also need to work out timing of medications to make sure they don't impact your sleep.

#### Stick to a schedule

Maintain a consistent sleep schedule, even on weekends. This will help set your body clock and your circadian rhythm.

#### Get some sunshine

Exposure to daylight in the morning has been shown to help sleep by increasing sleep duration, sleep quality and making it easier to fall asleep.

#### Get daily exercise

Exercise can help regulate sleep patterns and improve the quality and duration of sleep. Avoid exercising too close to bedtime as the immediate effects of exercise can interfere with your ability to fall asleep and stay asleep.

#### Manage stress

Stress and anxiety can make it hard to get a restful sleep. Try meditation or mindfulness to manage stress, or work with a counsellor to develop stress-busting strategies. Also avoid having difficult conversations before bed, as these can cause your stress levels to rise.

#### Avoid napping

Avoid taking naps during the day. If you must nap, avoid napping after 3pm and limit your nap to no more than 30minutes. Napping later or longer can interfere with your night time sleep.

#### Avoid screens and other stimulating activities

Using technology before bed has been linked to trouble falling asleep and increased alertness. This may be because bright screen lights can stop your body from releasing melatonin (the sleep hormone) that prepares you for sleep. Screen time can also stimulate your brain making it hard to get to sleep.

#### Watch what you eat and drink...and don't smoke

Limit alcohol, caffeine and cigarettes. While alcohol may help you fall asleep it can disrupt your sleep during the night. Caffeine and cigarettes are stimulants that can keep you awake.

You should also avoid large meals before bed, along with fried or fast food and spicy food. These can all interfere with your digestion, making it hard for you to sleep well.

Avoid drinking too much fluid before bed as this may result in trips to the bathroom during the night.

#### Create a bedtime routine

Create a relaxing bedtime routine to wind down before sleep. This could include reading, meditation, taking a bath or listening to relaxing music.

#### Set up your sleep environment

Save your bedroom for sleep and intimacy. Avoid eating, working , making phone calls or watching TV in your bed. Make sure you have a supportive, comfortable mattress and pillow, and your bed coverings give ample warmth without being too hot. When it's time for sleep your bedroom should be dark, quiet and cool.

### WHEN TO SEEK HELP

The relationship between pituitary conditions and sleep is complex and some people may need extra support.

If you continue to have problems with your sleep, talk to your endocrinologist or seek the help of a sleep specialist. Many people with pituitary conditions have sleep disorders that need to be properly diagnosed by a sleep specialist. If a sleep disorder is contributing to your poor sleep, the sleep specialist will be able to help with treatment.

It's particularly important to talk to your doctor if you snore loudly during the night, or other people in your household notice you choke or gasp in your sleep, as this could be a sign of sleep apnoea. Sleep apnoea has been associated with other health risks such as heart disease, diabetes and stroke. This condition can be treated, but it's important to be diagnosed by a sleep specialist to ensure the right treatment program.

## **MORE INFORMATION**

The Australian Pituitary Foundation provides social support for patients and carers, and has published a range of patient resources on pituitary conditions and treatments.

#### For more information, please visit our website: www.pituitary.asn.au

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## REFERENCES

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