Great Ormond Street Hospital for Children NHS Foundation Trust: Information for Families

### **Tourette syndrome and sleep**

Many children with Tourette syndrome (TS) struggle with sleep. This information sheet from Great Ormond Street Hospital (GOSH) gives some suggestions for how you can improve your child's sleep as well as some self-help strategies that children can try for themselves.

Sleep disturbances are disruptions in the normal sleep patterns which may be severe enough to interfere with a person's physical, mental and emotional functioning.

In the general population, sleep disturbances occur in around 10 per cent of children aged four to twelve years and 25 per cent of teenagers aged 15 to 18 years. Children with TS are also affected by sleep disturbances, with 60 per cent of children reporting difficulties.

Tics are said to occur in all stages of sleep and it is well known that parents and adults find it more difficult to get to sleep when they are worried.

Attention Deficit Hyperactivity Disorder (ADHD) has been found to be the most common disorder occurring alongside TS. Children with ADHD and TS are more likely to wake up.

# What are the most common sleep disturbances in children with TS?

- Difficulty falling asleep or early wakening
- Sleep walking
- Sleep talking
- Decreased dream sleep
- Worse sleep quality, quantity and increased non-tic movements, that is, tossing and turning
- Nightmares
- Prolonged wakefulness
- Frequent waking at night (not necessarily due to tics).

#### Why is sleep so important?

It is important for children to get enough sleep as sleep supports healthy growth and strengthens their immune system. Better sleep can also help children to regulate their emotions. Therefore interrupted and/or lack of sleep can lead to problems such as:

- Poor memory and concentration
- Difficulty in regulating emotions
- Anxiety
- Irritability
- Grogginess or lethargy
- Weight gain

The impact of these problems can affect daily life, such as how children function at school. Constant waking throughout the night can also be stressful for parents and other family members such as brothers and sisters.

#### **Treatment**

Further research is still required to offer a definitive treatment plan for children with TS who experience sleep disturbances. However, there are a number of ways in which you could help reduce the disturbance to your child's sleep:

- Keep a bedtime routine and ensure that bedtime and wake-up times are the same each day.
- Ensure that the bedroom is conducive to sleep i.e. dark, quiet and comfortable. Eliminate screen time one hour before bed.
- Encourage your child to exercise regularly and maintain a healthy diet.
- Reduce or eliminate their sugar intake in the late afternoon or evening.
- Tackle worries if you can before bed or set a plan to work on them in the morning.

Some children have also found a supplement called melatonin to be helpful. Melatonin is a hormone produced by the pineal gland in the brain that controls sleep and wake cycles. It is possible that melatonin may help in reducing the next day effects of sleep deprivation. Other medications to help with sleep may also be prescribed by your child's family doctor (GP).

If your child experiences sleep problems the first step should be to see your child's GP. If your child is under the care of a consultant for their TS, you should also alert them to the difficulties your child is having with their sleep.

## Further information and support

Northumberland, Tyne and Wear NHS Foundation Trust produce several helpful leaflets on common problems, including sleep problems. You can access the information sheets at web.ntw.nhs.uk/ selfhelp.

The Sleep Unit team have also produced an information sheet on sleep hygiene – available on our website at www.gosh.nhs.uk/medical-information/procedures-and-treatments/sleep-hygiene-children

The following book may also be helpful, particularly the chapter on sleep hygiene – you can order it from your local bookshop or see if you can borrow a copy from your local public library.

Morgan, N (2013) Blame my brain: the amazing teenage brain revealed. Walker Books. ISBN 1406346934

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