

Sleep Difficulties in Fragile X Syndrome

What is the prevalence and cause of sleep difficulties in FXS?

Around half of all individuals with fragile X syndrome have clinically significant sleep difficulties. It has been suggested that these changes in sleep behaviour are related to the absence of a fully functional FMRP gene which may affect the production of melatonin (a chemical in the brain which is related to the onset of sleep) and alternations in the sleep-wake cycle. Research has shown that boys with FXS have higher levels of melatonin than typically developing children.

Children that have more problematic health difficulties or severe behavioural characteristics may have a higher likelihood of experiencing sleep difficulties.

What are the kinds of sleep difficulties that occur in FXS?

Research shows that sleep problems start occurring in some children with fragile x syndrome when they are approximately four years old, although sleep difficulties can occur in older individuals. The most commonly reported sleep difficulties are problems falling asleep, and waking up many times during the night. Waking up early in the morning is also common but less frequent than the other reported difficulties.

Do sleep difficulties change over time?

The number of times individuals with fragile X wake up during the night appears to decrease with age. This is the case for both males and females with fragile X syndrome.

How can sleep difficulties be managed?

Medication can be used to help with sleep difficulties. However, one study reported that 4 out of 10 children who were receiving medication for their sleep difficulties were still experiencing sleep difficulties.

The Cerebra Charity provide a Sleep Service for support and advice, as well as videos discussing sleep problems that a child may experience. Please click the following link to access this information:

Cerebra Sleep Service

They also provide useful tips on what to do if your child is experiencing sleep difficulties:

Cerebra Sleep Checklist

For more information on the nature of sleep in children with intellectual disability, and what can be done to reduce or improve sleep problems, click here to read Cerebra's full Sleep Guide.	