Adult-onset obstructive sleep apnea and pediatric pharyngoplasty in 22q11.2 deletion syndrome Cancelliere S, Heung T, Fischbach S, Klaiman P, Bassett, AS Sleep Medicine Volume 104, Pages 49-55, 2023 DOI: 10.1016/j.sleep.2023.02.010

Obstructive sleep apnea (OSA), or upper airway blockage during sleep, is a fairly common sleep problem. It happens when muscles in the throat become too relaxed during sleep and prevent proper breathing. The brain is starved of oxygen, so the person wakes up every once in a while to breathe again. This leads to very broken sleep and tiredness during the day. This condition can affect the way the brain and heart work, and the person may have mood changes. OSA is a **treatable** condition.

In a pioneering study, our team found that OSA was quite common in adults with 22q. At an average age of only 32 years, about 1 in every 10 adults had OSA. Of those who had had a sleep study, over half were found to have OSA.

All of the usual risks for OSA - such as obesity, older age, asthma, and male sex - were also risk factors in 22q. However, a new finding was that having had certain types of surgery of the palate may also add to the risk of adult-onset OSA in 22q. The palate is the roof of the mouth, and it separates the mouth from the nose. Many children with 22q have palate and speech problems, and surgery improves the way their palate works and make their words easier to understand. It appears that in some individuals this helpful childhood surgery may increase the risk of OSA in adult years. We found this was the case even when taking into account the effects of other risk factors. Next, we want to find out why most people with 22q who have palate surgery do not develop OSA.

**Sleep apnea is treatable with continuous positive airway pressure (CPAP)**. In fact, our team found that the majority of adults with 22q who were prescribed CPAP were able to use this treatment in the long term. This helped to improve energy and mood, and often helped people lose weight, too. If you think you may have OSA, please check with your doctor to see if you need a sleep study.