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Sleep Can Be A Dangerous Game

“I love that baby”, my mother had uttered in a groggy manner just hours after her tonsillectomy to treat her obstructive sleep apnea. She was lying down partially elevated on the tawny brown sofa in our home, dozing in and out of sleep while my babbling eleven-month-old daughter attempted to steal her attention. “I love you”, she kept saying to all of us in the house. “We love you too”, we kept assuring her. It was a strange feeling-- having someone tell you over and over that they loved you after surgery, but in our minds, she was just loopy from the anaesthesia and opioids they had administered. It would be the last time we ever spoke with my mother again. The following morning, I tried waking her with my infant daughter in one arm--not only thirty minutes after my father had helped my mother to the bathroom to go brush her teeth. My mother was cold, limp, and unresponsive. She had no pulse, even after our attempts through CPR. Once the EMTs arrived ten minutes later, it took what felt like an eternity for them to get a pulse. The long, agonizing moments of waiting for my mother to come back to life awakened everything I always feared. “We’re going to be praying real hard”, the EMT said. Their expressions illuminated doubt. A part of me died in that small, sterile white meeting room where I begged God to save my mother’s life. She was pronounced brain dead at the hospital from severe oxygen deprivation that led to what the doctors claimed was “the worst case of brain damage they had ever seen.”

My mother had OSA, which is a commonly diagnosed form of sleep apnea that affects more than twenty-two million people in America. Sleep apnea can be diagnosed at

any age and consists of several types: obstructive, central, and mixed. Sleep apnea is “apnea that recurs during sleep and is caused especially by obstruction of the airway or a disturbance in the brain's respiratory center,” according to the Merriam-Webster medical dictionary. However, obstructive sleep apnea (or OSA) causes one’s airway to collapse or become blocked during sleep. My mother had the textbook definition and symptoms of OSA for as long as I could remember; snoring, choking and gasping for air during sleep, restlessness, depression, fatigue, chronic sleepiness, etc. To make matters worse, she was considered obese by doctors; a statistic she desperately wanted to change.

Obesity plays a major risk factor in sleep disorders such as obstructive sleep apnea. According to Rachael Swann, board certified registered nurse and simulation lab / clinical coordinator at Mars Hill University, she addresses that “If someone is overweight, then they are susceptible to numerous issues including respiratory disorders and OSA. The human body is one continuous working project and when one body system is interrupted, it is often trouble for all the major body systems. OSA is more common in obese patients because of body habitus, particularly if the person has a lot of abdominal adipose tissue because once they lie down, all of that extra adipose tissue will constrict the diaphragm, not allowing for adequate lung expansion, therefore making it more difficult to breathe and rendering the patient with unsatisfactory oxygenation.” In fact, America has doubled from six obese states from 2017 to twelve as of 2020 with a prevalence at or above thirty-five percent, according to *The State of Childhood Obesity: Helping All Children Grow up Healthy*, a report released by the Robert Wood Johnson Foundation last year. The report, which tracked obesity data at national and state levels, said that in North Carolina, the obesity rate in adults has risen twenty percent since 1990.

Although OSA can be treated, my mother was one of many who were unable to tolerate continuous positive airway pressure (CPAP) machines, which could have reversed the severe hypoxia that took place just within the twenty-four hours of her operation. According to *Death or near-death in patients with obstructive sleep apnoea: a compendium of case reports of critical complications*, published by the British Journal of Anaesthesia, “the effects of anaesthetics, sedatives and opioids on ventilatory responsiveness, arousal mechanisms and upper airway muscle tone have been implicated in potentially aggravating OSA in the postoperative period leading to life threatening hypoxia. Seventy-five percent of patients with OSA who suffered severe life threatening complications received opioids, and these events occurred with relatively small doses of opioids.” Because we thought the small doses of opioids were making my mother disoriented the night before she passed away, her slurred speech should have set off red flags for us. We didn’t know the warning signs of hypoxia. We didn’t know that morning, she would lay in a puddle of her own urine on the sofa just minutes after my father escorted her to go brush her teeth.

As of 2017, more data is being analyzed as well as extensive education in perioperative complication in OSA patients for the American Society of Anesthesiologists. Because major operations require general anaesthesia, it becomes a greater risk for postoperative complications in OSA patients because anaesthesia is a respiratory depressant. However, surgical procedures can be successful with OSA patients despite both low success rates and the likelihood of undergoing an additional procedure. Although some surgical procedures have improved or successfully eliminated OSA in patients, studies by the British Journal of Anaesthesia show that CPAP treatment

is the most effective if used consistently, as it is commonly prescribed to sleep apnea patients. “CPAP machines are a necessity, but a patient must use them consistently for any results. At Least four hours a night with CPAP is recommended for any noticeable change in reducing sleep apnea symptoms as well as the consequences that stem from this sleep disorder,” suggested an anonymous Asheville sleep technician, “Johnny”.

Dr. L. Michelle Gilley, associate professor of biology at Mars Hill University and sleep apnea sufferer suggests, “For any patient in recovery and up to 48 hours post-op (if they are sent home), should wear a pulse oximeter to monitor oxygen saturation levels at all times. These are inexpensive and should be mandatory especially for patients with sleep apnea. Diagnosis, awareness, diet modifications, exercise, self advocacy (especially with medical care), and use of CPAP machines are all important to being healthy and living a normal life with OSA.”

Most importantly, sleep health should not be taken lightly. The prevalence of obstructive sleep apnea continues to grow and destroy the health of millions of Americans, diagnosed or undiagnosed. From first-hand experience, OSA took my mother’s life, who was forty-six at the time. OSA became a life-threatening contributor to the dangerous effects of general anaesthesia after her tonsillectomy. Because of my mother’s death, the purpose I intend to carry forth is to raise awareness of the severity that this disorder can carry out in adulthood if left untreated. It is not too late to become an advocate for sleep health. Afterall, sleep can be a dangerous game.

Sources

<https://www.wect.com/2019/10/14/study-adult-obesity-rate-has-increased-percent-nc-since/>

<https://www.cdc.gov/media/releases/2020/s0917-adult-obesity-increasing.html>

<https://worldpopulationreview.com/state-rankings/obesity-rate-by-state>

<https://healthresearchfunding.org/sleep-deprivation-college-students-statistics/>

<https://academic.oup.com/bja/article/119/5/885/4384745>