

Sleep Apnea in Professional Football Players

Obstructive sleep apnea is a common disorder characterized by loud snoring, disordered breathing and chronic sleep disruption. A worrisome potential consequence of sleep apnea is an associated increased risk of heart disease, hypertension and stroke. It has also been suggested that obstructive sleep apnea may also be associated with daytime sleepiness, decreased reflexes, diminished alertness and impaired job performance.

A more in depth medical study involving approximately 300 National Football League (NFL) players in 2002 found that 14% of them or four times higher than noted in similarly aged adults in the general public, had sleep disordered breathing. In fact, larger sized players, notably linemen, had a 34% prevalence of sleep apnea. An earlier pilot study in 1997 involving 16 New York Giants linemen had suggested that such players might be at high-risk for the sleep disorder.

The main symptoms of sleep disordered breathing are grossly abnormal breathing patterns while sleeping and snoring. Those affected are often men with substantial neck size and large body mass. Estimates suggest that sleep apnea may be as common as diabetes or asthma, affecting about 20 million people in the USA. In spite of this frequency, many Americans may not realize that they have this sleep disorder.

The cornerstone of diagnosing sleep disordered breathing is called “polysomnography” which is an overnight noninvasive sleep study which measures vital signs, breathing patterns, cardiovascular, neurological and lung physiology. More recently, portable screening devices may be applied to the skin and used in the comfort of the home during sleep to detect early breathing abnormalities. This screening process may identify those individuals who really need the more expensive and intensive standard diagnostic tool involving a polysomnogram.

The treatment modalities for most cases of obstructive sleep apnea include continuous positive airway pressure devices and nasal masks that are worn during nightly sleep. Current support devices are lightweight and less cumbersome to people with this condition. Clinical symptoms are improved by such treatments but further study is needed to see if cardiovascular (CV) risk is reduced or daily job performance is increased.

The next stages of evaluation in football players with sleep apnea will involve: (1) measurements of CV and job performance in players with and without sleep apnea and (2) assessments of the influence of therapy on improving objective health status in players with sleep apnea.

The willingness of some NFL players to publicly support that they have sleep apnea and have undergone appropriate diagnosis and treatment is very important. Public awareness of this sleep disorder is currently of low visibility. Furthermore, general medical practitioners are also relatively unaware of the problem and its potentially harmful health consequences. It appears likely that many younger men who are of big body size are under-diagnosed and untreated. The impact of providing medical care for this group of people carries major public health significance. Obstructive sleep apnea is not just a disease of middle age and older people.