Sleep Apnea and Glaucoma

Glaucoma is a condition that is associated with a buildup of pressure within the eye, causing damage to the optic nerve. It affects nearly 60 million people worldwide and is the second-leading cause of blindness. If left untreated, [Glaucoma reduces peripheral vision](http://www.aao.org/eye-health/diseases/glaucoma-vision-simulator) and eventually may cause blindness by damaging the optic nerve. Some risk factors for Glaucoma are being over the age of 60, having certain ethnic backgrounds, and using steroids. It may also be induced by an eye injury. A recent study conducted by Taipei Medical University in 2013 has found a connection between the ocular condition and sleep apnea. While studies before remained inconclusive, this study has found that sleep apnea is an independent risk for the disease.

According to the World Health Organization, [sleep apnea](http://www.nhlbi.nih.gov/health/health-topics/topics/sleepapnea/) is a chronic condition that blocks breathing during sleep for more than 100 million people worldwide. In obstructive sleep apnea, the airway becomes blocked, causing breathing to stop for up to two minutes. Symptoms include loud snoring, gasping or choking while asleep, morning headaches and persistent daytime sleepiness. Some risk factors for having sleep apnea are being over the age of 40, male, overweight, having large tonsils, neck size, and tongue. You may also be at risk by having a family history of the condition.

The study took a retrospective approach by collecting data from those with sleep apnea across the Taiwanese population over five years. The study, published in the [journal Ophthalmology](http://www.aaojournal.org/article/S0161-6420(13)00008-0/abstract), was conducted on 1,012 people ages 40 and older in Taiwan who were diagnosed with sleep apnea, as well as 6,072 people without sleep apnea. They concluded that those diagnosed with sleep apnea were 1.67 times more likely to have open-angle glaucoma than those without the sleeping condition. The researchers are hoping that this study will encourage doctors to inform patients about the risks of glaucoma for those with sleep apnea and recommend proper sleep study evaluation and treatment with CPAP or BiPAP devices. The most likely cause of optic nerve damage over time is the lack of oxygen to the optic nerve during sleep.

There are several determining factors that pose a risk for Glaucoma. Only half of the people who have glaucoma are aware of it, because the disease is painless and vision loss is typically gradual. It is recommended to have a comprehensive eye exam once a year, so your optometrist will be able to detect and start earlier treatment if this condition is present.