

Sleep apnea - a severe national disease

Recognition and treatment of sleep apnea was the theme of Joslin Diabetes Center's Obstructive Sleep Apnea Symposium in Helsinki on 4th May in 2011. The aim of the symposium was to help public health care professionals to better recognise the symptoms of apnea.

The symposium was organized by Finland's Dialectologists and Researchers of Diabetes, The Finnish Association for the Study of Obesity and Finnish Sleep Research Society.

All the lecturers in the symposium were respected professionals: Professor Hannele Yki-Järvinen (University of Helsinki), Professor William C. Hsu (Harvard Medical School, Joslin Diabetes Center), Professor Tarja Saaresranta (University of Turku, pulmonary diseases) and Professor Jussi Pihlajamäki (clinical science of nutrition). The event was made possible by ResMed, the leading developer, manufacturer, and marketer of products for the diagnosis and treatment of sleep-disordered breathing.

Information for media

During the media lunch Professor Hsu briefly introduced the themes for his research. He is studying the causes of diabetes, especially among Asian Americans. In the USA, there is an obesity and diabetes epidemic that increases the risk for cardiovascular diseases. It has a clear connection with sleep-disordered breathing problems, especially obstructive sleep apnea. The second speaker was Tarja Saarenranta, whose subject was "Sleep Apnea and Health".

Sleep apnea is a national disease that 150,000 people in Finland suffer from. Poor quality of sleep caused by untreated apnea is a serious health risk that can cause cardiovascular diseases, type 2 diabetes, accidents, absences from work, and even untimely deaths.

Many Finnish people suffer from sleep apnea without knowing it, and the disease can often go undiagnosed. Sleep apnea is not difficult to recognise, and it can be treated without medicine with positive airway pressure. It is a well-known fact that when sleep is discontinuous, its quality decreases.

In this text, 'sleep apnea' refers to obstructive sleep apnea, in which there are pauses in breathing

(apnea) or periods of very shallow breathing (hypopnea) at least ten seconds long. They result from the upper respiratory tract constricting during sleep.

When the breathing pauses are recurrent

Sleep apnea involves recurrent breathing pauses that cause other symptoms, such as sleepiness and concentration problems. The most common reason for breathing pauses during sleep is that the respiratory tracts constrict as the tissues in the throat relax, causing a blockage. This is especially common among the overweight.

During a breathing pause, sleep becomes lighter and the sleeper may come close to waking up even hundreds of times during one night. When sleep is light for a long period of time, it will not invigorate the sleeper and his/her performance decreases when awake.

Sleep apnea has a lot of symptoms, and snoring can result in a diagnosis, even though not all snorers have sleep apnea. Also, sleeplessness as a symptom can be misleading.

Tiredness is a serious health risk

“The heart of a person with sleep apnea is under a great strain during sleep as its pulse rate increases to compensate for the lack of oxygen caused by the breathing pauses. Instead of resting, the heart becomes overstrained. If the night-time strain continues for a long time, it can even result in a heart attack,” states docent Tarja Saaresranta from Turku University Hospital.

Sleep deprivation also affects the sugar metabolism. People with sleep apnea are likely to also suffer from diabetes, which cannot be explained only by them being overweight. “Quality of sleep and its effects on our health should be recognized as a part of our lives that is as important as healthy food and sufficient physical exercise,” Saaresranta stresses.

Sleep apnea can cause other diseases

Many additional diseases are possible. Some examples are high blood pressure, obesity, problems in information processing and memory, heart failure, coronary artery disease, stroke, metabolic syndrome, type 2 diabetes, heart arrhythmia, and affective disorders.

Treatment will bring sunshine back to your life

Sleep apnea treatment is based on weight loss and other lifestyle changes. The most efficient and most common treatment is Continuous Positive Airway Pressure (CPAP) given through a mask-like device during sleep. Sleep apnea is known to increase blood pressure – and CPAP to decrease it. It can be used to help people with severe sleep apnea fall into deep sleep. These people hardly ever find the changes in lifestyle to be sufficient treatment.

The CPAP device treats the symptoms, but does not cure the disease, so the treatment is lifelong. Some select patients can also be helped by dental devices that prevent the lower jaw from moving backwards during sleep. In addition, various kinds of surgical treatments have been invented.

There is no medicine for sleep apnea, but with these devices, patients are woken up by breathing pauses less often and the quality of sleep improves substantially. Friends and family will also benefit from the treatment.

Do not neglect the treatment!

Sleep apnea requires the right kind of treatment, because if left untreated, it can even treble the risk for industrial and road accidents. Additionally, untreated sleep apnea increases health care costs and unemployment pensions as well as untimely deaths. Research has shown that the treatment is useful and cost-effective.

Also see the information box on the next page

Good to Know About Sleep Apnea:

- One third of those with sleep apnea are of normal weight; excess weight and obesity are common.
- Daytime sleepiness is a characteristic symptom of sleep apnea.
- Memory disorders, concentration problems, affective disorders, and impotence make daily life difficult.
- Night sweats, increased night-time urine excretion, morning headaches, heartburn and dry mouth often result in a wrong diagnosis, especially in women.

Why seek treatment?

- Effective treatment can help avoid many accidents, car crashes and absences from work.
- The number of additional diseases can also decrease with sufficient treatment.
- There is evidence of decreases in obesity, memory problems, blood pressure, etc.
- The treatment is also helpful when there is a risk of heart failure, coronary artery disease, stroke, metabolic syndrome, type 2 diabetes, and arrhythmia.

Does the treatment work?

- Weight loss is especially helpful in mild sleep apnea.
- There is evidence of the benefits of CPAP in coronary artery disease and in severe sleep apnea.
- According to a study, those who were treated with CPAP had significantly fewer heart attacks compared to those who were not.