

Even moderate weight loss can prevent and cure obstructive sleep apnoea

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(Medical Xpress)—Even a moderate weight reduction can prevent the progression of obstructive sleep apnoea (OSA), and even cure it, according to a 4-year Finish follow-up study published recently in *Sleep Medicine*. The study focused on the effects of weight loss on OSA and demonstrated, for the first time, that a sustained weight loss of just 5% was enough to prevent the disease from worsening and even cure it in a long-term follow-up.

Obstructive sleep apnoea (OSA) has become a major burden for our health care systems over the last years. Although it is one of the most increasingly prevalent non-communicable diseases, the vast majority of people with OSA still remain undiagnosed. OSA has also been found to be tightly linked with metabolic abnormalities, particularly type 2 diabetes, and cardiovascular morbidity. OSA is a chronic, progressive disease, and it is well-documented that moderate to severe forms of OSA are associated with an increased risk for cardiovascular morbidity and mortality. Obesity is the most important risk factor for OSA. Based on current knowledge about the evolution of OSA, weight gain represents a high risk for the further progression of the disease towards the more severe forms, particularly in patients who already have a partial obstruction of their upper airways associated with mild OSA. However, there has been a lack of well-designed studies on the effects of weight reduction on OSA. Furthermore, thus far, no studies have focused on the prevention of the progression of OSA. There are no national programmes for screening OSA or preventing the progression of the disease, nor are such programmes even planned at the moment around

the world. However, before larger scale programmes may be implemented or even planned in clinical settings, as have been done for the prevention of type 2 diabetes, there is a need for more reliable scientific evidence.

The study was conducted in Kuopio University Hospital, Finland, in collaboration with the University of Eastern Finland between 2004 and 2013. The study participants were moderately obese adult patients with mild OSA. The participants underwent either a 12-month supervised lifestyle intervention programme or were given standard care consisting of general verbal and written information about diet and physical activity. The main hypothesis was that even a moderate (5%, i.e. -5kg) but sustained weight reduction can achieve an improvement in OSA, thus preventing the progression of the disease when the treatment is started in the early stages of OSA.

This study provides first time long-term evidence that even a modest [weight reduction](#) can result in marked improvements of OSA and metabolism in overweight patients, and these positive changes are sustained even four years after the cessation of the active intervention, and the progression of the disease is thus prevented.

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