

LETTER TO THE EDITOR

Metabolic syndrome and obstructive sleep apnoea: two circumferences in the same individual

Journal of Human Hypertension advance online publication, 3 September 2009; doi:10.1038/jhh.2009.72

In order to draw attention to the mechanisms involved in metabolic syndrome and obstructive sleep apnoea, Dwivedi *et al.*¹ named their commentary 'two sides of the same coin'. Concerned about disclosing the diagnostic criteria to define metabolic syndrome and obstructive sleep apnoea, we paraphrased the title of this editorial as 'two circumferences in the same individual.'

The term *metabolic syndrome* has been applied to the clustering of risk factors that often accompany obesity and are associated with increased risk for both atherosclerotic cardiovascular diseases and type II diabetes. According to the American Heart Association/National Heart, Lung, and Blood Institute² criteria, the diagnosis is based on the following major criteria: central obesity (waist circumference: men ≥ 94 cm; women ≥ 80 cm; plus satisfying at least two of the conditions: glucose ≥ 100 mg per 100 ml or 5.6 mmol l⁻¹; HDL ≤ 40 mg per 100 ml or 1.03 mmol l⁻¹ (men), ≤ 50 mg per 100 ml or 1.29 mmol l⁻¹ (women); triglycerides ≥ 150 mg per 100 ml or 1.7 mmol l⁻¹; blood pressure $\geq 135/85$ mm Hg.

Indeed, obstructive sleep apnoea (OSA) syndrome increases the risk of both cardiovascular and cerebrovascular diseases and even death. Other cardiovascular risk factors, such as hypertension, diabetes mellitus, hyperlipidaemia and obesity, frequently accompany OSA³ and are particularly prominent among patients who have a collar size greater than 44.5 cm. A number of associated features of OSA suggest that sleep apnoea is a manifestation of the metabolic syndrome, because there is a strong association of OSA with android-central obesity, hypertension and diabetes, all overlapping with the factors associated with the metabolic syndrome.

The lay population is not aware of these criteria or the risks involved in these diagnoses. Thus, it would be interesting if we had a simple strategy to alert the population about the diagnoses of metabolic syndrome and sleep apnoea. We therefore suggest attaching a note to the trousers of men with waist circumference greater than 94 cm and those of women with waist circumference greater than 80 cm, as well as to shirts with collar size greater than 44.5 cm. These values could be adapted to the concerned population and abide by each country's Guidelines.

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