Health-Care Center

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General Summary

Shimbashi Medical Checkup Office

1. Preventive Medicine

We focused on metabolic syndrome, smoking, and lifestyle changes to prevent lifestyle-related disease. In April 2005, the Japanese Society of Internal Medicine and 8 other Japanese medical societies defined Japan-specific diagnostic criteria for metabolic syndrome. The criterion of waist circumference that indicates accumulating abdominal visceral fat has been discussed. We validated the evidence with the objects of occurrence of dyslipidemia, high serum glucose levels, and high blood pressure.

Research Activities

Shimbashi Medical Checkup Office

1. Metabolic syndrome

We performed a retrospective cohort study to investigate the relation of the cut-off value of waist circumference to the prevalence of dyslipidemia. The subjects, who had an annual medical checkup at our center from 2000 through 2008 and had no dyslipidemia at their initial examination, were extracted. Dyslipidemia was defined as a triglyceride (TG) level≥150 mg/dL, a high-density lipoprotein cholesterol (HDL-C) level<40 mg/dL, or treatment. The subjects were divided into 2 groups, a nononset group that showed no dyslipidemia and an onset group in which dyslipidemia developed in a time span of three years. We calculated the cut-off point between the nononset group and the onset group from the receiver operating characteristic curve, concerning abdominal circumference, body mass index (BMI), and the waist/height ratio. The cut-off values for the TG level were as follows: an abdominal circumference of 84 cm in men and 78 cm in women, a BMI of 23.5 kg/m² in men and 21 kg/m² in women, and a waist/height ratio of 0.5 in men and 0.49 in women. The cut-off values for HDL-C were as follows: an abdominal circumference of 85 cm in men and 79 cm in women, a BMI of 24.0 kg/m² in men and 21.5 kg/ m² in women, and a waist/height ratio of 0.5 in men and 0.5 in women. For both TG and HDL-C, the area under the receiver operating characteristic curve of the abdominal circumference was the highest among the 3 indexes.

Publications

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