

LIFE-STYLE DISEASES AND METABOLIC SYNDROME AFFECT ON THE PREVALENCE RATE OF OAB IN FEMALE PATIENTS VISITING TO PRIMARY CARE DOCTORS

Hypothesis / aims of study

The overactive bladder (OAB) symptom complex represents a disruption in the storage function of the lower urinary tract. Urgency is the core symptom of OAB. OAB occurs at a higher incidence in the elderly. The NOBLE study estimated the overall prevalence of this condition in the US population at 16.0% in men and 16.9% in women, and there was an overall increase in prevalence (1). We previously conducted the SURPRISE survey (Survey on the Gap in Perception for Overactive Bladder between Primary Care Physician and the Female Patient with Chronic Disease) on the supposition that many female patients attending primary care clinics for chronic diseases remain untreated for OAB symptoms (2). In the present report, using the pooled data of the SURPRISE survey, we have analyzed the influence of background diseases on the prevalence of OAB in female patients visiting to primary care physicians.

Study design, materials and methods

Survey populations were internists, surgeons, orthopaedists, neurosurgeons, gynaecologists, and the female patients aged 40 years or older visiting these doctors for the treatment of chronic diseases. Questionnaires (for doctors and patients) were sent by mail to survey sites, where doctors and patients completed the questionnaires. In the present report, we utilized the data regarding to patient's background diseases from the questionnaire for doctors. In the questionnaire for patients, we used the results of OAB-symptom score (OABSS). Based on OABSS, we analysed OAB prevalence rate in patients with each background disease. In addition, contribution of each disease on OAB prevalence rate, using multiple regression analysis.

Results

121 doctors and 1388 patients responded the questionnaire. In the patients' age distribution, there were 161 cases (11.6%) in 40's, 280 cases (20.2%) in 50's, 333 cases (24.0%) in 60's, 584 case (42.1%) in over 70 years old and 30 unknown cases (2.2%). Overall prevalence rate of OAB defined by OABSS in the patient's questionnaire was 22.3%. The prevalence rate was increased with age. Only half of the OAB patients were treated for their symptoms by the primary care doctors. In the background diseases of the patients, hypertension (53%) was the highest. Other major background diseases were orthopaedic diseases (31%), hyperlipidemia (25%), gastrointestinal diseases (24%), diabetes mellitus (13%) brain and neurological disease (11%), ischemic heart disease (7%), gynaecological disease (5%), psychiatric disease (4%) and respiratory disease (3%). The rank order of OAB prevalence rate of patients with each background disease was 40.0% (ischemic heart disease), 36.5 % (brain and neurological disease), 34.9 % (psychiatric disease), 32.8% (gastrointestinal diseases), 32.1% (diabetes mellitus), 27.4% (hypertension), 25.7 % (hyperlipidemia), 24.3% (orthopaedic diseases), 18.5 % (respiratory disease) and 17.0% (gynaecological disease). Multiple regression analysis showed that ischemic heart disease, brain and neurological disease, psychiatric disease, hypertension, gastrointestinal disease and diabetes mellitus have significantly higher odds ratios for OAB prevalence rate.

Interpretation of results

It has been suggested that metabolic syndrome or risk of atherosclerosis was related to lower urinary tract symptoms (3). In the present study, significant higher odds ratios for OAB prevalence rates were observed in patients with ischemic heart disease, brain and neurological disease, hypertension, and diabetes mellitus. The data suggested that life-style diseases and metabolic syndrome significantly related to OAB. By making positive efforts to enquire about their OAB symptoms in the patients with life-style diseases and metabolic syndrome, primary care doctors can promote management for OAB and improve QOL in patients suffering from OAB symptoms.

Concluding message

The data showed the higher OAB prevalence rates, but the lower treatment rates in female patients visiting to primary care doctors. Significantly high contribution of ischemic heart disease, hypertension and diabetes mellitus to OAB prevalence rate may suggest that life-style diseases and metabolic syndrome were significantly related to OAB.

References

1. World J Urol 20: 327–336, 2003.
2. LUTS 1: 45-50, 2009.
3. Eur Urol 50: 582-586, 2006.

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Is this a clinical trial?	No
What were the subjects in the study?	HUMAN
Was this study approved by an ethics committee?	Yes
Specify Name of Ethics Committee	Kumamoto University and Kumamoto Rosai Hospital
Was the Declaration of Helsinki followed?	Yes
Was informed consent obtained from the patients?	Yes