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, 3]. In the present report, using the pooled data of the SURPRISE survey, we have analyzed the effects of age on the prevalence and bothersomeness for OAB in female patients visiting to primary care physicians.

Study design, materials and methods
Survey populations were internists, surgeons, orthopedists, neurosurgeons, gynecologists, 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 completed the questionnaires for doctors. Doctors handed the questionnaires for patients to survey subjects as consecutively as possible, whether the patients had LUTS or not. Patients received the questionnaires from their doctors and completed them within 1 week. There were many questions in doctors’ and patients’ questionnaires. In the present report, from the questionnaire for doctors, we utilized the data regarding to patient's background, doctor's estimations of OAB prevalence in patients of their clinic and the most bothersome OAB symptom of the patients. In the questionnaire for patients, we used the results of OAB-symptom score (OABSS) and IPSS-QOL score. Treatment status and the satisfaction with the treatment in the patients were also analyzed.

Results
The questionnaires were sent to 1068 clinics. 121 doctors and 1388 patients responded the questionnaire. Hypertension (53%) was the highest background disease in the patients. Other major background diseases were orthopedic diseases (31%), hyperlipidemia (25%), gastrointestinal diseases (24%), diabetes mellitus (13%). 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%). OAB prevalence rate estimated by doctors in their patients was 9.5%. However, prevalence rate of OAB defined by OABSS in the patient’s questionnaire was 22.3%. The prevalence rate was increased with age. There were some tendencies of the most bothersome symptoms by patients’ age groups. Urgency and urgency incontinence are equally bothersome for patients in all age groups. Frequency was the most bothersome for patients in 40’-50’s. This rate decreased with age. Patients considering that nocturia were the most bothersome symptom increase with age. About 25 % of the patients showed dissatisfaction with their present urinary condition. The rate of dissatisfaction was increased with age. The evaluation of the correlation between satisfaction for present urinary condition (point of IPSS QOL score) and severity of various OAB symptoms (point of each symptom in OABSS) showed that urgency was the highest contribution to dissatisfaction with present urinary condition in all age groups. In the elderly, contribution of urgency incontinence and nocturia was increasing. In the treatment, pharmacological treatment with antimuscarinic drugs was performed in almost all patients. Correlation between satisfaction with pharmacological treatment and each OAB symptom was analyzed. The standard partial regression coefficient in each symptom showed that the contribution of urgency satisfaction with pharmacological treatment was the highest. In the age-difference, urgency was the highest contribution to treatment satisfaction in all age groups, especially in the younger patients. In the elderly, especially in 70’s, nocturia and urgency incontinence showed the increasing contribution.

Interpretation of results
In the present survey, approximately 25% of all patients were expressing dissatisfaction with their urinary condition. When satisfaction with urinary condition was correlated with specific OAB symptoms, urgency was most closely associated with a report of dissatisfaction. This means that severe urgency score was well related to lower satisfaction level for the present urinary condition. While, in the elderly patients, urgency incontinence and nocturia also showed an increasing contribution. When assessed in terms of treatment satisfaction, a lower level of urgency was also strongly related to higher level of patients’ perception of treatment satisfaction in all ages. The results suggested that the management of urgency was the mostly important in OAB patients.

Concluding message
The prevalence of OAB and urgency increased with age, with urgency incontinence and nocturia being a proportionately greater problem in the elderly population. Management of urgency is essential for improving QOL and satisfaction with the treatment in OAB patients.

References