Introduction To clarify characteristics of bone fragility in middle-aged Japanese women, we have examined the correlation between bone quality by novel ultrasonic bone densitometry system and several biochemical markers of bone turnover.

Methods Subjects are 121 female applied for this study voluntarily. We evaluated which factors are related with bone quality; bone mineral density or bone elastic modulus as fragile risk in healthy Japanese population. We have measured bone metabolism markers (tartrate-resistant acid phosphatase (TRACP)-5b, bone-specific alkaline phosphatase). For the assessment of examined factors, we have divided the subjects into three subgroups according to the age (Group A: <49, Group B: 50–59, Group C: ≥60) and investigated the correlation of above-mentioned bone fragile index, biomarkers, and the menopause reference (pre-menopause, peri-menopause, post-menopause).

Results 90 were included in Group A, 21 in Group B and 10 in Group C. Regarding the menopause status, approximately 90% of subjects in Group A had a menstruation regularly, 25% of subjects in Group B had an irregular menstruation and 60% showed the post-menopause. The bone mineral density and bone elastic modulus showed significantly lower in Group C than in Group A or B. The bone-specific alkaline phosphatase and TRACP-5b were significantly higher in Group B and C than in Group A (p<0.05) whereas no statistical differences of these parameters between Group B and C had been noted.

Conclusion The early screening or objective bone check-up analyses by individual are necessary as an initiative medical prevention of osteoporosis and bone fragility in middle-aged women.
**Introduction**

Asthma is the most common chronic disease in childhood and has been designated a public health problem due to the increase in its prevalence in recent decades, the amount of health service expenditure it absorbs and an absence of consensus about its aetiopathology. The relationships among psychosocial factors and the occurrence, symptomatology, and severity of asthma have recently been considered. There is still controversy about the association between asthma and child’s mental health, since the pathways through which this relationship is established are complex and not well researched. This study aims to investigate whether behaviour problems are associated with the prevalence of asthma symptoms in a large urban centre in Latin America.

**Methods**

Cross-section study of 869 children between 6 and 12 years old, residents of Salvador, Brazil. The International Study of Allergy and Asthma in Childhood (ISAAC) questionnaire was used to evaluate prevalence of asthma symptoms. The Child Behaviour Checklist (CBCL) was employed to evaluate behavioural problems.

**Results**

19.26% (n=212) of the children presented symptoms of asthma. We found good evidence of an association between behaviour problems and asthma symptoms (PR: 1.53; 95% CI 1.13 to 2.08, p=0.007) and this association remained statistically significant after adjustment for sex, age, maternal education, income, parental asthma, minor psychiatric disorders in the mother, Alcohol use, allergies in dust and smoking (PR: 1.49; 95% CI 1.10 to 1.95, p=0.01).

**Conclusion**

These results suggest an association between behavioural problems and paediatric asthma, and support the inclusion of mental healthcare in the provision of services for asthma morbidity.