

## Polypharmacy related falls in the elderly

서울아산병원 내과

\*김혜진, 이영수, 이은주

Polypharmacy is defined as the use of four or more medications. The elderly were often prescribed multiple medications due to underlying diseases. This increase adverse drug reaction and drug interaction. Older people taking many medications are at higher risk of falls. This case is about an old patient who fell by multiple medications. Clinicians must be concerned about the adverse effect of polypharmacy, especially in old patient and should regularly review the medication of their patients and must decrease unnecessary medications.

## The Association Between Muscle Mass and Brachial Ankle Pulse Wave Velocity in Elderly.

<sup>1</sup>Department of Internal Medicine Seoul National University College of Medicine, <sup>2</sup>Seoul National University Bundang Hospital\*Jung-Yeon Choi <sup>1</sup>, Sol-Ji Yoon <sup>1</sup>, Min-Gu Kang <sup>1</sup>, Sun-wook Kim <sup>12</sup>, Kwang-il Kim <sup>12</sup>, Cheol-Ho Kim <sup>12</sup>

**Background:** Arterial stiffness, which can be evaluated by measuring pulse wave velocity (PWV), is associated with the risk of cardiovascular disease. Sarcopenia, loss of mass or strength of the skeletal muscles, also associated with adverse outcomes. We evaluated the relationship between height-adjusted appendicular skeletal muscle mass (ASM) and brachial ankle pulse wave velocity (baPWV) in community-dwelling elderly people. **Methods:** We studied 345 participants of the Korean Longitudinal Study on Health and Aging (KLoSHA) whose aged 65 and older and ankle brachial index greater than 0.90. ASM was measured by dual-energy x-ray absorptiometry (DXA). The baPWV was measured as an index of arterial stiffness. We used reference cut-off values from previous studies of the baPWV defined as 1750.0 cm/sec. **Results:** 206 (59.7%) patients have baPWV over 1750 cm/sec. In multiple logistic regression analysis, after controlling group of age (65 - 74, 75 - 84, over 85), sex, BMI group (< 18.5, 18.5-22.9, 23-24.9, 25-29.9, 30-34.9,  $\geq 35$  kg/m<sup>2</sup>), systolic blood pressure, presence of hypertension and diabetes, low density lipid, high density lipid, triglyceride, uric acid, and urine albumin creatinine ratio, Appendicular Skeletal Mass Index (ASMI) defined as ASM/height<sup>2</sup> had significant negative association with higher baPWV than cut-off value of 1750.0 cm/sec. The fully-adjusted odds ratios per 1 kg/m<sup>2</sup> were 0.646 (95% CI : 0.427- 0.978,  $p=0.039$ ). **Conclusion** This study provides that lower appendicular muscle mass was associated with increased arterial stiffness in community dwelling elderly.