

Abstract  
Paper Sessions

Aging and Dementia

A - 04

**Signs of Injury, Preexisting Health Conditions, and Emergency Department Discharge Location among Older Adults with Mild Traumatic Brain Injuries**

*J Karr, G Iverson, H Isokuortti, A Kataja, A Brander, J Öhman, T Luoto*

**Objective:** Preexisting health conditions are associated with worse outcome following mild traumatic brain injury (MTBI), which is especially important in MTBI management among older adults. This study focused on older adults who presented to an emergency department (ED) following uncomplicated MTBI, examining the relationship between clinical signs of MTBI, preexisting conditions, and the location of ED discharge. **Method:** Participants included older adults ( $n = 616$ , men = 44.8%,  $\geq 55$  years-old) who presented to the Tampere University Hospital ED with uncomplicated MTBI (GCS = 15; ground-level falls = 72.4%). Data were collected retrospectively from hospital records, including clinical signs of injury, preexisting health conditions [including preinjury abnormalities on head computed tomography (CT)], and location of follow-up (i.e., home versus other health/rehabilitation facility). A higher odds ratio (OR) indicated a greater likelihood of continued care discharge to another health facility.

**Results:** Among participants 55–69 years-old, preexisting neurological diseases (OR = 2.92), mental/behavioral health conditions (OR = 3.05), and CT abnormalities (OR = 3.02) were associated with greater odds of continued care. Among participants 70+ years-old, preexisting neurological diseases (OR = 2.60) and CT abnormalities (OR = 2.12) were associated with greater odds of continued care. Preexisting circulatory system diseases, loss of consciousness, and amnesia were not associated with greater odds of continued care for either age group. **Conclusions:** Among older adults with uncomplicated MTBIs, preexisting health conditions were associated with greater odds of continued care than loss of consciousness or amnesia. These findings reveal the importance of preexisting health conditions in the acute clinical management of MTBI in older adults, in that preexisting conditions have greater associations with care planning than clinical signs of injury.