

Evidence of Underreporting and Misrecognition of Delirium in Hip Fracture Patients: An Opportunity to Improve Quality of Care

Naoko Onizuka¹, Fernando Andres Huyke, Myriam Ann Roby, Tom Fredric Martell, Rachael Marie Scislow, Sarah C Jones, Andrew Clifford Olson, Nicole James, Julie A Switzer²

¹Methodist Hospital, ²Park Nicollet Methodist Hospital

INTRODUCTION:

Delirium is common after hip fracture and associated with high morbidity and mortality. Proper identification and management of delirium is important to ensure improved outcomes and patient safety, but it can be challenging to do so. Our team noticed a low prevalence of delirium compared to the national average. With this in mind, the purpose of this project was to identify whether delirium is underrecognized and/or underreported in our institution, and if so, where in the process of diagnosis and reporting does this occur.

METHODS:

Patients aged 60 and older admitted for hip fracture from January 2021 until July 2021 were identified. Admission and discharge diagnoses were extracted to identify patients diagnosed with delirium throughout their hospitalization, excluding those admitted with delirium. A retrospective chart review was conducted on a random sample of 98 patients from this initial cohort. The Chart-Based Delirium Identification Instrument (CHART-DEL) was used to identify missed diagnosis of delirium from this sample. Process maps of delirium identification and reporting were then created via observations and interviews to determine where the missed diagnoses occurred.

RESULTS:

The incidence of delirium in all patients (N=176) was 15.3%. Fifteen patients (15.5%) within the random sample (n=98) received a diagnosis of delirium. Twenty patients (24.7%) went undiagnosed despite evidence of delirium. Considering missed diagnoses, the prevalence of delirium was higher in the sample compared to all patients (35.7% vs 15.3%, $p < 0.001$). The majority of misses were due to an inability of identifying delirium (60%) or a failure to document/code delirium diagnosis (20%). While just 20% of patients with a correct diagnosis of delirium had baseline cognitive impairment, 80% of misses had baseline cognitive impairment ($p = 0.001$).

DISCUSSION AND CONCLUSION: In our institution, diagnosis of delirium is missed and underreported among hip fracture patients. The main reason for these misses was due to an inability to recognize delirium by clinicians, which can be particularly challenging in patients with existing cognitive impairment. Delirium recognition, and thus potentially hip fracture outcomes, can be a target for quality and care improvement amenable to provider effort.

