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Consistency between anticholinergic burden scales in the elderly with fractures

 PLOS OneLuis Fernando Valladales Restrepo^{1,2}, Marlene Duran Lengua³, Edgar Castro⁴, [Jorge Machado Alba](#)^{5,6}¹[Universidad Tecnológica de Pereira, ²Audifarma S.A. Fundación Universitaria Autónoma de las Américas], ³[Universidad de Cartagena], ⁴[Hospital Universitario de Caldas], ⁵[Universidad Tecnológica de Pereira, ⁶Audifarma S.A]

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ABSTRACT

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Objective: falls and bone fractures are important causes of morbidity and mortality in the elderly. The objective of this study was to identify the degree of consistency between the anticholinergic scales used for patients diagnosed with fractures.

Methods: this was an analytical agreement study conducted in patients diagnosed with vertebral and nonvertebral fractures in Colombia. The quadratic-weighted *kappa* coefficient was used to identify the consistency between the Anticholinergic Drug Scale-ADS, Anticholinergic Cognitive Burden Scale-ACB and Anticholinergic Risk Scale-ARS in assessing the prescriptions of fracture patients during the month prior to the fracture, during their stay as an inpatient and at discharge, according to Landis criteria.

Results: 220 patients with fractures were included, with a mean age of 75.3±10.3 years, and 68.2% were women. The ACB scale identified the highest anticholinergic burden (26.8%) in prescriptions made the month before the fracture, and the highest agreement was between ACB and ADS (0.717); during hospitalization and at discharge, the cholinergic antagonists were best identified with ADS (77.7% and 72.1%, respectively), with the best agreement between ACB and ARS (0.613 and 0.568, respectively). The prescription of tramadol was found in 64.1% of hospitalized patients and in 61.4% of patients at the time of discharge.

Conclusions: the scales evaluated show marked discrepancies between them, with highly variable frequencies of anticholinergic drugs identified at the different prescription times, and with low agreement among them, which is why the scales are not interchangeable in patients with bone fractures.

EXTERNAL LINK

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THIS PROTOCOL ACCOMPANIES THE FOLLOWING PUBLICATION

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ATTACHMENTS

[Data Base and tables.xlsx](#)

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