MEDICATION EXPOSURE MAY CONFOUND THE ASSOCIATION BETWEEN DIETARY INTAKE AND FRAILTY

Alexander N. Bennett, Danijela Gnjidic, and Sarah N. Hilmer

Clinical Pharmacology and Aged Care, Royal North Shore Hospital, Kolling Institute of Medical Research and University of Sydney, Sydney, New South Wales, Australia

Address correspondence to Alexander Bennett, BMedSc (hons), Level 1 Main building, Royal North Shore Hospital, St. Leonards, Sydney, New South Wales 2065, Australia. Email: aben3804@uni.sydney.edu.au

Received May 1, 2013; Accepted May 20, 2013

Decision Editor: Stephen Kritchevsky, PhD

The article by Bollwein and colleagues (1) presented an interesting and plausible relationship between dietary quality and frailty in a cohort of older community-dwelling adults. Although the article describes medication utilization (>3 medications) at baseline in the frail, prefrail, and non-frail groups, it fails to adjust for any medication data on the number and type of medicines used that may confound the results.

There is substantial evidence to suggest that exposure to greater numbers and specific classes of medicines are associated with frailty. Polypharmacy (≥5 medicines) is significantly associated with increasing prevalence of frailty (odds ratio [OR] of 2.55; 95% confidence interval [CI]: 1.69–3.84) and incidence of frailty over 2 years (OR 2.45; 95% CI: 1.42–4.23) in community-dwelling older men (2). Specific medication classes may influence physical performance measures (3) that are components of frailty and may contribute to the development of the frailty phenotype (2).

Furthermore, there is evidence that greater numbers and some classes of medicines have their own effect on nutrition and dietary intake. Polypharmacy has been associated with malnutrition (4). Antipsychotics and corticosteroids are two examples of medication classes that have been shown to increase appetite and trigger fluctuations in patient cravings (5).

Therefore, adjustment for the number and type of medications taken would provide a more accurate association between dietary quality and frailty.

References