P-31 (Early career physician)

Prevalence of potentially inappropriate medications at admission and discharge among hospitalized elderly patients.

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Background:

Although potentially inappropriate medications (PIMs) should be avoided as possible, hospitalization often increase the use of PIMs among elderly patients. Nonetheless, few studies have investigated the prevalence of PIM use at admission and discharge among hospitalized elderly patients in Japan.

Study design:

A prospective single-center cross-sectional study using electronic medical records.

Setting:

Acute care hospital.

Participants:

All consecutive patients aged 65 years or older (n = 739) who were admitted to the internal medicine ward from May 2017 to May 2018 and who were alive at discharge were included. Patients who were electively admitted for diagnostic or intervention procedures were excluded.

Outcomes:

Prevalence of any PIM use.

Measurements:

The proportion of patients taking any PIMs at admission and discharge was calculated. The rates of reduction in the prevalence of any PIM use from admission to discharge were also calculated. Potentially inappropriate medication was defined based on the 2015 Beers criteria.

Results:

The median patient age was 82 years (interquartile range (IQR) 74 - 88), 389 (52.6%) were women, the median Charlson Comorbidity Index was 2 (IQR 0 - 3), and the median number of medications at admission was 5 (IQR 3 - 8). The proportion of patients taking any PIMs at admission and discharge was 47.2% and 32.2%, respectively. The prevalence of any PIM use was significantly reduced from admission to discharge (reduction rate 0.32; 95% confidence interval 0.25 – 0.38). The most common categories of PIMs at discharge were proton-pump inhibitors, benzodiazepines, hypnotics, and antipsychotics.

Limitations:

Adherence to and temporal changes in medication use after discharge were not evaluated.

Conclusions:

Approximately one-third of hospitalized elderly patients were taking any PIMs at discharge, although there was a significant reduction in the proportion of PIM use from admission to discharge. Our findings should be confirmed at other Japanese hospitals.

Registration:

This research was registered at the University Hospital Medical Information Network clinical registry (Registration number: UMIN000027189)