

Submission Id: 5004

Title

Inappropriate antivertiginous drug prescribing for patients with vestibular symptoms in primary care

Priority 1 (Research Category)

Prescribing and pharmacotherapeutics

Presenters

Hà Ngo, MD, Otto Maarsingh, Pauline Slottje, PhD, Marco Blanker, MD, PhD, Feikje Groenhof, MSc, Jettie Bont, MD, PhD, Vincent van Vugt, MD, PhD

Abstract

Context: There is insufficient evidence that antivertiginous drugs are effective in patients with vestibular symptoms. However, betahistine is one of the most frequently prescribed off-label drugs. The role of family physicians in these inappropriate drug prescriptions is still unclear.

Objective: This study aimed to evaluate the frequency of (long-term) antivertiginous drug prescriptions in primary care. We also aimed to identify factors associated with long-term prescriptions.

Study design and Analysis: We performed a retrospective observational cohort study. We used descriptive statistics to determine baseline characteristics and to calculate the prevalence and incidence of prescriptions. We performed a multivariable logistic regression analysis to identify factors associated with long-term prescriptions.

Setting: We used routine primary care data from more than 1.2 million patients registered at 269 primary care practices throughout the Netherlands within the period March 2018 to February 2021.

Population studied: We included adult patients with vestibular symptoms and/or prescriptions for antivertiginous drugs using International Classification for Primary Care (ICPC) codes and Anatomical Therapeutic Chemical codes.

Intervention/Instrument: Not applicable.

Outcome measures: Primary outcome was the prevalence of prescriptions for antivertiginous drugs. Secondary outcomes were the incidence of prescriptions, prevalence of long-term prescriptions, and factors associated with long-term prescriptions.

Results: We included 72.429 patients with vestibular ICPC codes, 9.2% of these patients had at least one prescription for antivertiginous drugs. 2.700 patients received prescriptions without a vestibular ICPC code. Of all patients with prescriptions, 36% received long-term prescriptions. Older age, Ménière's

disease, and practices with 7.501-10.000 registered patients were associated with a higher rate of long-term prescriptions, while patients with vestibular neuritis, benign paroxysmal positional vertigo and a symptom diagnosis of lightheadedness were less likely to receive one. Patients registered at practices in extremely urbanized areas were also less likely to receive long-term prescriptions.

Conclusions: Inappropriate antivertiginous drug prescriptions, including long-term prescriptions, are still common in Dutch primary care. Our findings indicate that management of patients with vestibular symptoms by family physicians can be further improved.