A case-control study on adverse effects: H2 blocker or proton pump inhibitor use and risk of vitamin B12 deficiency in older adults.

Valuck RJ¹, Ruscin JM.

Abstract

OBJECTIVE: Acid-suppressant drugs are commonly prescribed for elderly patients, a population in which vitamin B(12) deficiency is a common disorder. The purpose of this study was to examine the possible association between use of prescription histamine H-2 receptor antagonists (H2RA) or proton pump inhibitors (PPI) and vitamin B(12) deficiency in older adults.

STUDY DESIGN AND SETTING: This was a case-control study in a University-based geriatric primary care setting. Among patients aged 65 years or older with documented serum vitamin B(12) studies between 1990 and 1997, 53 vitamin B(12)-deficient cases were compared with 212 controls for past or current use of prescription H2RA/PPI according to information in subjects' medical records.

RESULTS: Controlling for age, gender, multivitamin use, and Helicobacter pylori infection, chronic (≥12 months) current use of H2RA/PPI was associated with a significantly increased risk of vitamin B(12) deficiency (OR 4.45; 95% CI 1.47-13.34). No association was found between past or short-term current use of H2RA/PPI and vitamin B(12) deficiency.

CONCLUSION: These findings support an association between chronic use of H2RA/PPI by older adults and development of vitamin B(12) deficiency. Additional studies are needed to confirm these findings.

PMID: 15135846 [PubMed - indexed for MEDLINE]
A case-control study on adverse effects: H2 blocker or proton pump in...