# Metformin use linked to less vitamin B12 measurement

February 17 2017

(HealthDay)—Long-term metformin use is associated with lower serum

vitamin B12 concentration, although metformin users are less likely to receive vitamin B12 testing, according to a study published online Feb. 9 in the *Journal of the American Geriatrics Society*.

Vijaya Kancherla, Ph.D., from Emory University in Atlanta, and colleagues conducted a retrospective cohort study involving 3,687 veterans aged 50 years or older with type 2 diabetes and long-term metformin therapy, and 13,258 without diabetes and with no prescription for metformin. The authors examined the proportion of patients who received a serum B12 test.

The researchers found that after long-term metformin prescription, only 37 percent of older adults with diabetes receiving metformin were tested for vitamin B12 status. The metformin-exposed group had significantly lower mean B12 concentration than those without diabetes (439.2 versus 522.4 pg/dL; P = 0.0015). About 7 percent of those with diabetes receiving metformin and 3 percent of those without diabetes or metformin use were vitamin B12 deficient (P = 0.0001). After adjustment for confounding variables, metformin users were two- to three-fold more likely not to receive vitamin B12 testing, depending on their age, compared with those without metformin exposure.

"Because metformin is first-line therapy for type 2 diabetes, clinical decision support should be considered to promote serum B12 monitoring among long-term metformin users for timely identification of the potential need for B12 replacement," the authors write.

**More information:** Abstract
Full Text (subscription or payment may be required)