

Poster #17

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Title of Research: Trends In Prevalence And Screening of Vitamin B12 and Folate Deficiencies in Veterans with Cognitive Impairment

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Introduction/Purpose:

The risk for development of vitamin B12 deficiency, folate deficiency, and cognitive impairment all increase with age, with those at highest risk aged 65 years or older. Studies have suggested that deficiency of vitamin B12 and folate may play a role in pathogenesis of cognitive impairment in the elderly. The objective of this study is to determine if annual vitamin B12 and folate laboratory screening rates associated with an initial diagnosis of cognitive impairment have changed over time.

Experimental Design:

This 10-year retrospective study involved national Veterans Affairs (VA) patients aged ≥ 40 years old with newly diagnosed cognitive impairment. Descriptive statistics were generated to describe the population. Annual prevalence rates were evaluated to assess trends, with subgroup analyses performed to evaluate differences by age and degree of cognitive impairment.

Results:

Of 252,629 patients with new onset cognitive impairment, 50-60% were screened for vitamin B12/folate deficiencies. There was a statistically significant trend toward increased screening rates over the last decade. Subjects ≥ 65 years old had a statistically significant trend indicating increased screening rates over time. Annual comparisons from 2003-2010 between age groups demonstrated statistically higher screening rates for those <65 years compared to ≥ 65 years old. A statistically significant trend toward increased screening was apparent in both Alzheimer's and other cognitive impairment diagnoses subgroups. Annual comparisons between subgroups showed those with other cognitive impairment diagnoses were screened at a significantly higher rate than those with Alzheimer's Disease.

Conclusions:

This is the first study to evaluate B12/folate screening for cognitive impairment in the VA system. Although this remains a low utility screening process, it should still play a role in evaluation of cognitive impairment as supported by guidelines. The potential reversibility of cognitive dysfunction yields a substantially high benefit to patient care and quality of life for our veterans.