MEDICAL INTERNET NEWS

BS NGUYỄN ĐÌNH LINH

January 31, 2022 | 2 min read

SAVE

Some antihypertensives may reduce risk for cognitive decline

By Joe Gramigna, MA

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Certain antihypertensive medications may help prevent cognitive decline, according to results of a cohort study published in *JAMA Network Open*.

"Although use of antihypertensive medications that stimulate (angiotensin II receptor type 1 blockers, dihydropyridine calcium channel blockers and thiazide diuretics) vs. inhibit (angiotensin-converting enzyme [ACE] inhibitors, beta-blockers and nondihydropyridine calcium channel blockers) type 2 and 4 angiotensin II receptors has been associated with lower risk of dementia, their association with cognitive outcomes in hypertension trials, with BP levels in the range of current guidelines, has not been evaluated," **Zachary A. Marcum, PharmD, PhD,** associate professor in the department of pharmacy at the University of Washington, and colleagues wrote.

Marcum and colleagues conducted the secondary analysis of individuals aged 50 years or older with hypertension and increased cardiovascular risk but no history of diabetes, stroke or dementia who participated in the randomized SPRINT Trial. As the exposure, they examined prevalent use of angiotensin II receptor type 2 and 4-stimulating or -inhibiting antihypertensive medication regimens at 6 months. A composite of adjudicated amnestic mild cognitive impairment or probable dementia served as the primary outcome.

A total of 8,685 participants prevalently used antihypertensive medication regimens at 6 months (mean age, 67.7 years; 64.3% men), of whom 2,644 (30.4%) used exclusively stimulating, 1,536 (17.7%) inhibiting and 4,505 (51.9%) mixed antihypertensive medication regimes.

Across a median of 4.8 years of follow-up, Marcum and colleagues noted 45 vs. 59 cases per 1,000 person-years of amnestic mild cognitive impairment or probable dementia among prevalent users of regimens featuring exclusively stimulating vs. inhibiting antihypertensive medications (HR = 0.76; 95% CI, 0.66-0.87). When they compared stimulating-only with inhibiting-only users, they found amnestic mild cognitive impairment rates of 40 vs. 54 cases per 1,000 person-years (HR = 0.74; 95% CI, 0.64-0.87) and probable dementia rates of eight vs. 10 cases per 1,000 person-years (HR = 0.8; 95% CI, 0.57-1.14). Further, they noted residual confounding, according to results of

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Increased vitamin D may prevent NAFLD in patients with European ancestry

By Kate Burba

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Increased levels of vitamin D may prevent nonalcoholic fatty liver disease among European populations, according to research published in *Clinical Gastroenterology and Hepatology*.

"Vitamin D has been revealed to modulate liver inflammation and fibrogenesis and to improve hepatic response to insulin in animal studies. Furthermore, an inverse association between serum 25-hydroxyvitamin D (S-25(OH)D), a clinical marker of vitamin D status, and NAFLD has been observed in several cross-sectional and case-control studies, although not all," **Shuai Yuan, BMed, MMedSc,** of the Institute of Environmental Medicine at the Karolinska Institutet in Stockholm, and colleagues wrote. "These inconsistent findings and possible effects of reverse causality and residual

colleagues wrote. "These inconsistent findings and possible effects of reverse causality and residual confounding on the associations in the observational studies hinder the causal inference in the association between vitamin D and NAFLD."

In a bidirectional Mendelian randomization study, researchers aimed to determine the association between S-25(OH)D and NAFLD using summary-level data from the SUNLIGHT consortium (79,366 individuals), a genome-wide association meta-analysis (1,483 cases and 17,781 controls), the FinnGen consortium (894 cases and 217,898 controls) and the UK Biobank study (275 cases and 360,919 controls). They used seven and six independent genetic variants associated with S-25(OH)D and NAFLD at the genome-wide level, respectively, as instrumental variables.

Researchers observed genetic correlations between S-25(OH)D with NAFLD and certain liver enzymes with genetically predicted higher levels of vitamin D associated with a decreased risk for NAFLD. Further, for one standard deviation increase in genetically predicted S-25(OH)D levels, the combined OR of NAFLD was 0.78 (95% CI, 0.69-0.89).

When analyzing liver enzymes, researchers found S-25(OH)D inversely correlated with alkaline

Hypertension in young adults may lead to brain changes later in life

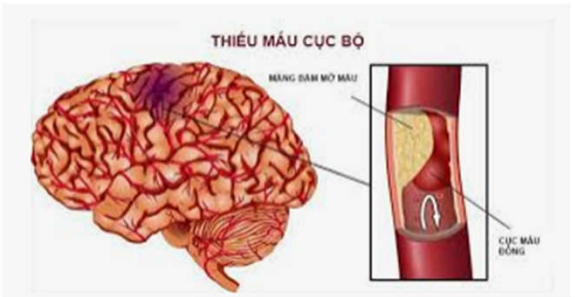
Written by Robby Berman on February 8, 2022 —
Fact checked by Hannah Flynn

Overall, the study tracked more than 5,000 Black and white adults who were aged 18–30 years at the start of the project in 1985–1986.

Dr. Lineback told *Medical News Today*, "Our study included participants starting in their 20s and followed over 30 years into their 50s (average age at follow-up being 53); teenagers were not included."

Speaking with the AHA Newsroom, Dr. Lineback says, "We were surprised that we could see brain changes in even this small sample of participants from the CARDIA study."

The researchers found equal changes to the brain across all racial and ethnic groups.



Said Dr. Lineback to *MNT*:

Brain changes

"The changes in the brain structure that we noted on MRI," Dr. Lineback told *MNT*, "were related to changes in the size of specific areas of the brain."

"These areas," said Dr. Lineback, "are important for many functions, including thinking, emotions, and moving."

Dr. Larry B. Goldstein from the University of Kentucky in Lexington, who was not involved in the research, explained to *MNT*:

"The study reported lower brain volumes in older adulthood in those with higher blood pressures as young adults. Other studies find that high blood pressure is associated with injury to the brain's white matter and deeper structures, generally related to blood vessel changes. Although not reported in this study, such changes can affect cognition (memory, processing, etc.)."

Was

Study: Vitamin D Deficiency Linked to Severe COVID

Carolyn Crist

February 08, 2022

WebMD

Editor's note: Find the latest COVID-19 news and guidance in Medscape's Coronavirus Resource Center.

People with a vitamin D deficiency are more likely to have a severe or critical case of COVID-19, according to a new study published in the journal *PLOS ONE*.

The study is based on data from Israel's first two coronavirus waves before vaccines were widely available. The scientists stressed that vitamin supplements aren't a substitute for vaccines but that they can help immunity levels.

"We found it remarkable, and striking, to see the difference in the chances of becoming a severe patient when you are lacking in vitamin D compared to when you're not," Amiel Dror, MD, the lead

The research team looked at vitamin D levels for more than 250 patients hospitalized at the Galilee Medical Center with a positive COVID-19 test between April 2020 and February 2021. The vitamin D levels were based on testing conducted before the hospitalization as part of routine bloodwork or for vitamin D deficiency, ranging from 14 to 730 days before the positive PCR test.

Patients with a vitamin D deficiency were 14 times more likely to have a severe or critical case of COVID-19. What's more, the mortality rate for those with insufficient vitamin D levels was 25.6%, compared with 2.3% among those with adequate levels.

The differences still applied after researchers controlled for the patients' age, gender, and history of chronic diseases.

Health officials in several countries have recommended vitamin D supplements during the pandemic, even while data was sparse, *The Times of Israel* reported. Recent studies have pointed to the links between vitamin D deficiency, severe COVID-19, and hospitalization, though researchers wondered whether the coronavirus caused the deficiency in the first place.

To answer that question, Dror and colleagues looked closer at the data among Israeli patients to get a better picture of their vitamin D levels before COVID-19 infection.

Seniors at Higher Risk of Other Medical Conditions After COVID-19

Adam Leitenberger

February 11, 2022

Nearly one-third of adults over age 65 developed one or more new medical conditions in the weeks following a COVID-19 infection, according to new research.

The findings of the observational study, which were published in the BMJ, show the risk of a new condition being triggered by COVID is more than twice as high in seniors, compared with younger patients. Plus, the researchers observed an even higher risk among those who were hospitalized, with nearly half (46%) of patients having developed new conditions after the acute COVID-19 infection period.

Respiratory failure with shortness of breath was the most common postacute sequela, but a wide range of heart, kidney, lung, liver, cognitive, mental health, and other conditions were diagnosed at least 3 weeks after initial infection and persisted beyond 30 days.

This is one of the first studies to specifically describe the incidence and

Cohen and colleagues reviewed the health insurance records of more than 133,000 Medicare beneficiaries aged 65 or older who were diagnosed with COVID-19 before April 2020. They also matched individuals by age, race, sex, hospitalization status, and other factors to comparison groups without COVID-19 (one from 2020 and one from 2019), and to a group diagnosed with other lower respiratory tract viral infections before the pandemic.

Risk of Developing New Conditions Was Higher in Hospitalized Patients

After acute COVID-19 infection, 32% of seniors sought medical care for at least one new medical condition in 2020, compared with 21% of uninfected people in the same year.

The most commonly observed conditions included:

- Respiratory failure (7.55% higher risk).
- Fatigue (5.66% higher risk).
- High blood pressure (4.43% higher risk).
- Memory problems (2.63% higher risk).
- Kidney injury (2.59% higher risk).
- Mental health diagnoses (2.5% higher risk).
- Blood-clotting disorders (1.47 % higher risk).

July 07, 2020 | 2 min read

Proton pump inhibitor use doubles risk for COVID-19

Healio Gastroenterology

By Monica Stonehill

Perspective from Brian B. Baggott, MD, FACG

+ Source/Disclosures

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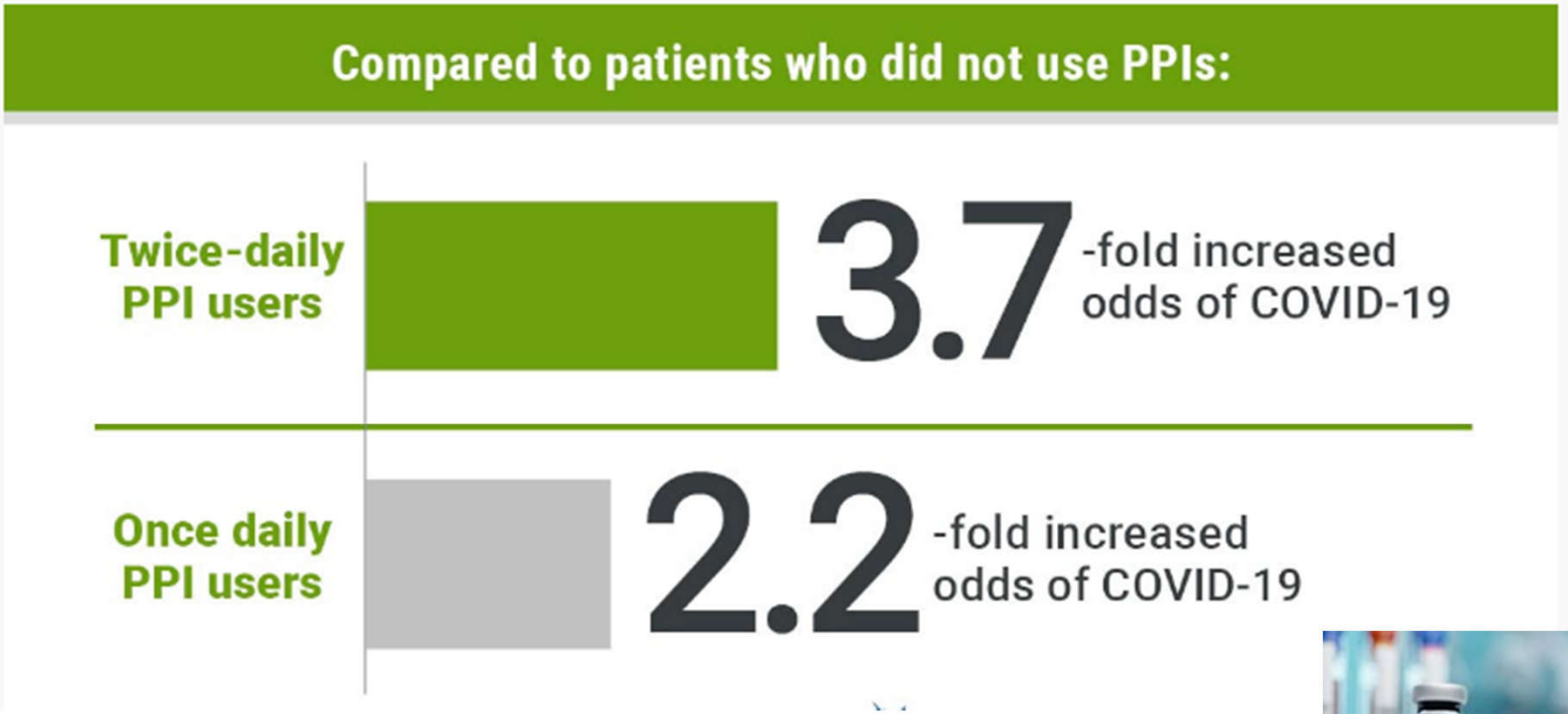
An independent, dose-response relationship was seen between proton pump inhibitor use and COVID-19 positivity, according to a study published in the *American Journal of Gastroenterology.*

"We found that PPI use, particularly twice-daily dosing, is associated with increased odds for reporting a positive COVID-19 test, even after accounting for a wide range of sociodemographic, lifestyle, and clinical variables," **Christopher V. Almario, MD, MSHPM,** from the department of Medicine at Cedars-Sinai Medical Center in Los Angeles, told *Healio Gastroenterology*. "Our findings continue to emphasize that PPIs should only be used when clinically indicated at the lowest

reporting a positive COVID-19 test, even after accounting for a wide range of sociodemographic, lifestyle, and clinical variables," **Christopher V. Almario, MD, MSHPM,** from the department of Medicine at Cedars-Sinai Medical Center in Los Angeles, told *Healio Gastroenterology*. "Our findings continue to emphasize that PPIs should only be used when clinically indicated at the lowest effective dose."



Researchers performed a population-based, online survey of 53,130 patients from May 3 to June 24, 2020 to determine if PPIs increased the risk for COVID-19 among community-dwelling Americans. They used multivariable logistic regression to report on a positive COVID-19 test to adjust for confounding factors.

Christopher Almario

Brennan M.R. Spiegel

Of those surveyed, 3,386 patients reported a positive COVID-19 test. Investigators noted a significantly increased odds for reporting a positive COVID-19 test in patients who used PPIs either once daily (OR = 2.15; 95% CI, 1.9–2.44) or twice daily (OR = 3.67; 95% CI, 2.93–4.6) compared with those who did not use PPIs. An elevated risk was not seen among patients who took histamine-2 receptor antagonists (H2RAs).

According to researchers, 3,267 patients who tested positive were symptomatic and 647 patients said they experienced a new onset of abdominal pain, diarrhea and nausea/vomiting. Results from regression analysis demonstrated patients who took lower-dose PPIs (n = 266, 10.9%; OR = 0.62; 95% CI, 0.49–0.78) had a lower chance for reporting GI COVID-19 symptoms compared with patients not on PPIs (n = 297, 39.5%).

"This study does not mean that people on PPIs should just stop their medicines," **Brennan M.R. Spiegel, MD, MSHS,** professor-in-residence of medicine and public health at Cedars-Sinai Medical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