Low-dose aspirin use associated with 20% increased anemia risk in older adults

June 19 2023

Credit: Pixabay/CC0 Public Domain

An analysis of the ASPREE (ASPirin in Reducing Events in the Elderly) trial found that the use of low-dose aspirin was associated with a 20 percent increased incidence of anemia and decline in ferritin, or blood iron levels, in otherwise healthy older adults. These findings suggest that periodic monitoring of hemoglobin should be considered in older patients taking aspirin. The analysis is published in *Annals of Internal*

Medicine.

Approximately half of older persons in the United States have reported preventative aspirin use. One of the complications of aspirin use is an increased risk for major bleeding, particularly gastrointestinal bleeding. Although the risk for overt bleeding due to aspirin has been well characterized, very few studies have measured the effect of aspirin on anemia, particularly in older populations.

Researchers from Monash University, Melbourne conducted a post-hoc analysis of the ASPREE randomized controlled trial. The trial included 19,114 persons aged 70 years or older who were randomly assigned to take 100 mg of aspirin daily or placebo. Hemoglobin was measured annually, and ferritin was measured at baseline and 3 years after randomization.

The data showed that the risk for developing anemia was 23.5 percent among those assigned to receive low-dose aspirin. These results were accompanied by a small but greater decrease in mean hemoglobin and a greater decline in ferritin concentrations among those receiving aspirin.

Differences in clinically significant bleeding events did not account for the overall difference in incident anemia or the decline in ferritin observed in ASPREE but was most likely due to occult blood loss given the observed steeper decline in ferritin in participants allocated to aspirin.

More information: Effect of Low Dose Aspirin versus Placebo on Incidence of Anemia in the Elderly, *Annals of Internal Medicine* (2023). DOI: 10.7326/M23-0675

Provided by American College of Physicians