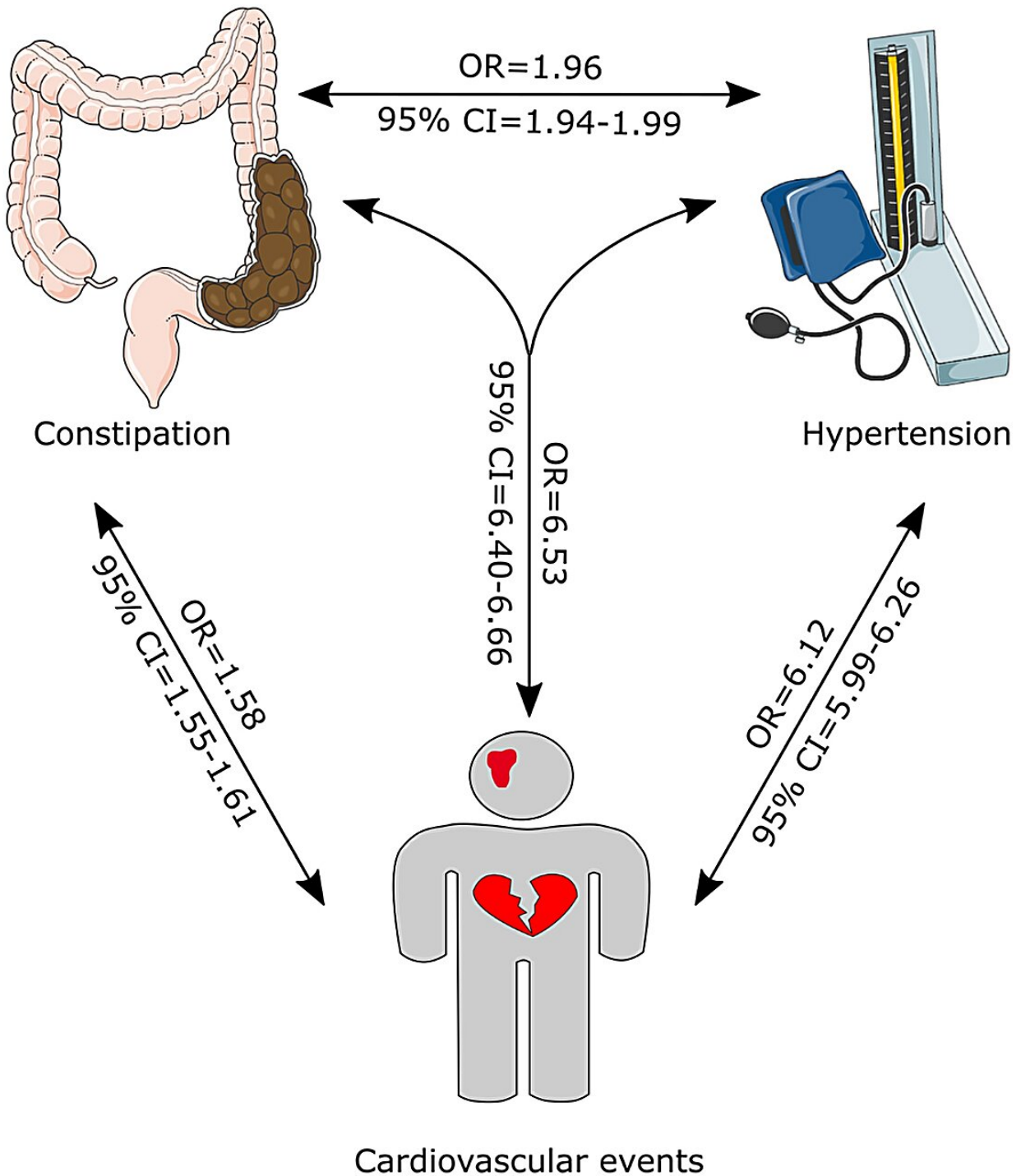


Constipation associated with increased risk of hypertension, cardiovascular events in elderly Australian patients

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Summary of the findings. This study found that constipation was positively associated with hypertension and cardiovascular events. CI, confidence interval; OR, odds ratio. This figure was partly generated using Servier Medical Art, provided by Servier, licensed under a Creative Commons Attribution 3.0

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A relatively common health problem—constipation—has been shown to be a risk factor for hypertension and cardiovascular events such as stroke in people over 60.

The extensive La Trobe University study of over half a million [hospital admissions](#) in Victoria suggests that interventions to address [constipation](#) may reduce these risks in [elderly patients](#).

The study, led by Professors Grant Drummond and Chris Sobey and published in *Scientific Reports*, looked at 541,172 [hospitalized patients](#) over 60 years of age.

For each constipation admission, one exact age-matched non-constipated admission was randomly selected from all hospitalizations within two weeks to form the control arm of the study.

The researchers found that patients with constipation had almost double the risk for hypertension, and were also more likely to suffer from major cardiovascular events such as heart attack and stroke.

The number of people with cardiovascular diseases (CVD) has nearly doubled over the past 30 years, and the number of deaths from CVD has increased from 12.1 million to 18.6 million during this time.

According to Professor Drummond, despite efforts to modify traditional risk factors for CVD with lifestyle and drug interventions, cardiovascular events are still responsible for 32% of global deaths, 85% of which are due to heart attacks or stroke.

"Therefore, identifying non-traditional CVD [risk factors](#) and developing strategies to address them is critical to further reduce CVD-associated morbidity and mortality," Professor Drummond said.

While it is unclear whether constipation is a direct the cause of hypertension in elderly patients, according to Professor Sobey,

"Such a relationship is plausible because in constipation there is increased water absorption from the gut, microbiota changes, and inflammation, all of which could lead to hypertension," Professor Sobey said.

The study found that:

- constipation in patients was associated with a 96% increased risk of hypertension and also a an increased risk of myocardial infarction, stroke and all cardiovascular events, compared to patients with no constipation
- patients with both constipation and [hypertension](#) had a more than 500% higher risk of [cardiovascular events](#) than patients with neither condition.
- these relationships were similar in males and females
- 15.2% of people over 60 in the study suffered from constipation

More information: Courtney P. Judkins et al, Association of constipation with increased risk of hypertension and cardiovascular events in elderly Australian patients, *Scientific Reports* (2023). [DOI: 10.1038/s41598-023-38068-y](https://doi.org/10.1038/s41598-023-38068-y)

Provided by La Trobe University

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