

Key Messages

Patients using high potency statins after a heart attack or stroke have a slightly greater risk of developing diabetes, compared to patients using low potency statins.

Implications

Physicians should consider the increased risk of developing diabetes when prescribing high potency statins. Statin choice needs to be a decision between physician and patient, taking medical history and other factors into account.

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Link to publication
(Dormuth et al. 2014)
<http://www.ncbi.nlm.nih.gov/pubmed/24874977>

What is the issue?

- High and low potency statins are prescribed for people who have had a heart attack or stroke to reduce their risk of having a second event.
- Both are effective but high potency statin use has been linked to an increased risk of developing type 2 diabetes.

What was the aim of the study?

- This study, conducted by the Canadian Network for Observational Drug Effect Studies (CNODES), evaluated the increase of new onset diabetes in people using high potency statins, compared with low potency statins. All had experienced a previous heart attack, stroke or heart procedure.

How was the study conducted?

- CNODES investigators conducted eight population-based cohort studies and a meta-analysis with health records of 136,966 patients from six Canadian provinces and two international databases.
- As-treated, nested case-control analyses were performed in each cohort to compare the incidence of diabetes in users of high versus low potency statins.

What did the study find?

- High potency statin use was associated with a 15% higher rate of new onset diabetes compared with low potency statin use in the first two years of treatment.
- This increased risk was the greatest in the first four months of statin use, with a 26% relative increase in diabetes risk for high potency statin users. An estimated 342 patients need to be treated with a high potency statin for two years to cause one new case of diabetes.
- Physicians should reconsider their statin prescribing habits and think about the risks of high potency statins. A low potency statin may provide the same benefit as a high potency statin for some patients, without exposing them to an unnecessary risk of diabetes.
- CNODES has the ability to analyze a large amount of anonymous patient data to reliably assess questions of drug safety and effectiveness. The results of this study, the most comprehensive of its kind, are consistent with previous research.

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