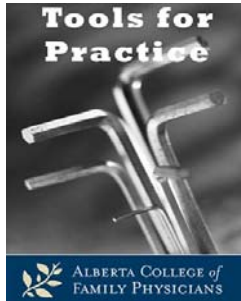


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Type II Diabetics and ASA: Always or Maybe Sometimes?

Clinical Question:

Should ASA be recommended in all patients with Type II diabetes but no history of cardiovascular disease (CVD)?

Evidence:

- Two recent randomized controlled trials of ASA in Type II diabetics address this question.
 - The JPAD study¹: 2,539 Type II diabetics on low dose ASA (81-100mg) or nothing for 4.4 years
 - CVD events were not significantly different
 - 5.4% on ASA vs. 6.7% non-ASA (p=0.16).
 - Bleeding events (hemorrhagic stroke and severe gastrointestinal) were not significantly different
 - In patients ≥ 65 (prespecified subgroup), ASA reduced CVD events
 - 6.3% ASA vs. 9.2% non-ASA (p=0.047), number needed to treat=35.
 - The POPADAD study²: 1276 Type II diabetics (with asymptomatic peripheral artery disease) on low dose ASA (100mg) or placebo for 6.7 years
 - CVD events were not significantly different
 - 18.2% ASA vs 18.3% Placebo (p=0.86)
 - Gastrointestinal bleeding events were not significantly different

Context:

- These findings are supported by the Primary Prevention Project (PPP) study of higher risk patients without CVD history³
 - In diabetics (1031 patients), ASA did not result in a statistically significant difference in CVD events
 - While non-diabetics (3753 patients) with ≥ 1 CVD risks had statistically significant benefit with ASA
- The Canadian Diabetes guidelines⁴ correctly suggest ASA is not necessary in all diabetics but should be considered in “high risk” groups.
 - Their definition of “high risk” includes males ≥ 45 years, females ≥ 50 years, patients with microvascular or macrovascular disease, family history, diabetes >15 years or extreme level of a single risk factor (LDL >5.0)

- However, this “high risk” group includes patients that did not benefit from ASA in the latest studies.¹⁻³
- High quality evidence has not clearly identified “high risk” diabetics who will benefit from ASA (except perhaps those aged ≥65).

Bottom-line: According to present evidence, ASA should not be universally recommended in all Type II diabetics with no history of CVD.

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1. JAMA. 2008;300(18):2134-2141.
2. BMJ. 2008 Oct 16;337:a1840.
3. Diabetes Care. 2003 Dec;26(12):3264-72.
4. Can J Diabet 2008; 32: S102-06.

Tools for Practice is a biweekly article summarizing medical evidence with a focus on topical issues and practice modifying information. It is coordinated by G. Michael Allan, MD, CCFP and the content is written by practising family physicians. Archived articles are available on the Towards Optimized Practice website.

This communication reflects the opinion of the author and does not necessarily mirror the perspective and policy of the Alberta College of Family Physicians.