

CADTH Optimal Use Project in Brief

Optimal Warfarin Management for Prevention of Thromboembolic Events in Patients with Atrial Fibrillation

Condition

Atrial fibrillation, also called A-Fib or AF, is the most common abnormal heart rhythm. It affects an estimated 350,000 Canadians. Although patients with A-Fib often have no symptoms, it can lead to serious medical complications — such as stroke or other blood clots.

Drug

Warfarin is a drug that has been used for more than 60 years to prevent strokes and other complications in patients with A-Fib. It does not treat the abnormal heart rhythm. Warfarin works by making the blood less likely to form clots.

Issues

Warfarin is effective in preventing strokes and other blood clots in patients with A-Fib. But there are some challenges with warfarin therapy. Warfarin interacts with some foods and several other drugs. Too much warfarin can put a patient at risk for bleeding. Too little warfarin can result in a stroke or other blood clot. Finding the perfect warfarin balance can be tricky, and requires different dosing strategies for different patients. Frequent blood tests to monitor warfarin therapy are required. Most patients with A-Fib taking warfarin are followed by their family doctor (usual care), but some are seen in specialized anticoagulation clinics, while others may manage their own warfarin therapy. But how is warfarin therapy best managed to get the greatest possible benefit from the drug?

Methods

An expert panel made optimal use recommendations on managing warfarin therapy, based on a systematic review of the clinical evidence and a review of the economic evidence.

An analysis of current practice helped to identify gaps in knowledge and practice and will inform knowledge mobilization activities.

Key Messages

Warfarin has been used for more than 60 years and is safe and effective in preventing stroke and other complications in patients with atrial fibrillation — but there's still room for improvement in how it's managed:

- Managing warfarin therapy should follow a structured plan, whether it is taking place in a specialized anticoagulation clinic, a family doctor's or specialist's office, or other care setting.
- A structured approach to managing warfarin therapy in any care setting should:
 - ensure ongoing patient education and follow-up
 - make use of dosing tools
 - involve caregivers and other health professionals.
- Patient self-testing and self-management of warfarin may be an option for some patients, but is not recommended for most.

Research Results

It's unclear from the available evidence whether specialized anticoagulation clinics result in improved clinical outcomes compared with usual care. The evidence on patient self-testing and self-management was mixed, but they may lead to improvements in some patient outcomes. The costs and cost-effectiveness of these alternatives to usual care are uncertain.

For complete reports and intervention tools on this topic, please visit www.cadth.ca.

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