Rivaroxaban reduced recurrent venous thromboembolism, with a similar risk of bleeding, compared with aspirin

Question

In people with venous thromboembolism who have completed 6 to 12 months of anticoagulant therapy, does rivaroxaban (20 mg daily or 10 mg daily) decrease risk of symptomatic recurrent venous thromboembolism compared with aspirin (100 mg daily)?

The study

Who? The study included 3396 adults who completed 6 to 12 months of anticoagulant therapy for objectively confirmed, symptomatic proximal deep vein thrombosis or pulmonary embolism in whom there was uncertainty about whether treatment should be continued.

What? The study compared 2 doses of rivaroxaban (20 mg daily or 10 mg daily) with aspirin (100 mg daily).

Rivaroxaban (Xarelto®)	vs	Aspirin
Rivaroxaban, 20 mg by mouth daily Rivaroxaban, 10 mg by mouth daily		Aspirin, 100 mg by mouth daily

What the researchers found

The 2 doses of rivaroxaban did not differ for any of the outcomes.

3 fewer people out of 100 taking rivaroxaban (20 mg daily or 10 mg daily) had symptomatic recurrent venous thromboembolism compared with those taking aspirin (100 mg daily).

Fatal thromboembolism, bleeding, and death from any cause did not differ for people who received rivaroxaban (20 mg daily or 10 mg daily) compared with those who received aspirin (100 mg daily).

The bottom line

In people with symptomatic venous thromboembolism who completed 6 to 12 months of anticoagulation, rivaroxaban at a standard dose or low dose for up to 12 additional months decreased recurrent symptomatic venous thromboembolism compared with aspirin, without increased bleeding.

Summary of findings

Rivaroxaban vs aspirin in patients with symptomatic venous thromboembolism treated with 6 to 12 months of anticoagulation

Outcomes	Rate of events with rivaroxaban, 20 mg daily	Rate of events with rivaroxaban, 10 mg daily	Rate of events with aspirin, 100 mg daily	Absolute effect of rivaroxaban, 20 mg or 10 mg daily, at 1 year
Recurrent symptomatic venous thromboembolism*	1.5%	1.2%	4.4%	About 3 fewer people out of 100 had recurrent symptomatic venous thromboembolism at 1 year.
Deep vein thrombosis	0.8%	0.6%	2.6%	About 2 fewer people out of 100 had deep vein thrombosis at 1 year.
Pulmonary embolism	0.5%	0.4%	1.7%	About 1 less person out of 100 had a pulmonary embolism at 1 year.
Fatal venous thromboembolism	0.2%	0.1%	0%	No effect†
Major bleeding‡	0.5%	0.4%	0.3%	No effect†
Clinically relevant non-major bleeding	2.7%	2.0%	1.8%	No effect†

*Deep vein thrombosis and/or pulmonary embolism.

†Although the rates for the 2 groups look different, the differences were not statistically significant—this means that the difference could simply be due to chance rather than due to the different treatments.

‡Includes fatal bleeding.

This Evidence Summary is based on the following article:

Weitz JI, Lensing AWA, Prins MH, et al; EINSTEIN CHOICE Investigators. ***Rivaroxaban or Aspirin for Extended Treatment of Venous Thromboembolism.*** *N Engl J Med. 2017;376:1211-22. PubMed (https://www.ncbi.nlm.nih.gov/pubmed/28316279?dopt=Abstract)*

For Family Physicians

Secondary prevention of venous thromboembolism (VTE)

How long should I treat my patient with anticoagulants after VTE?

The duration of anticoagulation is determined by balancing the risk of recurrent VTE after stopping anticoagulation against the risk of bleeding if anticoagulation is continued. Contrary to popular belief, duration of treatment is ***not*** based on resolution of persisting thrombus on ultrasound or CT, which may be present in a substantial proportion of patients after initial treatment. Patients with VTE *provoked* by a major transient risk factor (e.g., surgery or pregnancy) are generally treated for 3 months. Extended therapy is considered for patients who have a minor risk factor (e.g., travel) or no clear risk factors, and prefer to continue protection from recurrent VTE.

The goal of the EINSTEIN CHOICE study was to determine if low-dose rivaroxaban would be as effective as standard-dose rivaroxaban at preventing recurrent VTE but with a lower risk of bleeding. Both doses were compared with aspirin because aspirin has been shown to reduce the risk of recurrent VTE by about one third, with a low risk of bleeding.[1, 2]

Can I apply the results of the EINSTEIN CHOICE study to my patients?

If you and your patient are uncertain about whether to continue anticoagulation after a minimum of 6 months of initial treatment, the results of the EINSTEIN CHOICE study provide reassurance that either low-dose or standard-dose rivaroxaban is more effective and just as safe as aspirin for preventing recurrent VTE. However, these results should ***not*** be applied to patients who have an ongoing risk factor (e.g., active cancer, ongoing immobility). Furthermore, due to the high proportion of patients enrolled in EINSTEIN CHOICE who had provoked VTE (60%), which is generally considered to have a lower risk of recurrence, it is less clear whether all patients with unprovoked VTE would be just as safe on low-dose rivaroxaban as on the standard dose.

Doctor, I have finished 6 months of treatment with rivaroxaban. Can I stop it now and take an aspirin instead?

If you wish to continue protection from another blood clot, remaining on rivaroxaban will protect you better than aspirin and the risk of bleeding on a daily basis is similar. However, if you bleed due to a physical injury, the bleeding is likely to be more severe if you are taking rivaroxaban. Rivaroxaban is also more expensive than aspirin and may not be not covered for extended treatment by your private or government drug plan.

1. Becattini C,Agnelli G, Schenone A, et al; WARFASA Investigators. Aspirin for preventing recurrence of venous thromboembolism. N Engl J Med. 2012;366:1959-67. 22621626
2. Brighton TA, Eikelboom JW, Mann K, et al; ASPIRE Investigators. Low-dose aspirin for preventing recurrent venous thromboembolism. N Engl J Med. 2012;367:1979-87. 23121403

Published: Thursday, August 17, 2017