

How effective are antiplatelet agents for the treatment of DVT's?

Clinical Question

How effective are antiplatelet agents in addition to current best medical practice (BMP) compared to current BMP (with or without placebo) for the treatment of deep venous thrombosis (DVT)?

Bottom Line

Low-certainty evidence (4 RCTs, 901 participants) suggests that antiplatelet agents in addition to BMP compared to BMP plus placebo for the treatment of chronic DVT, following the standard initial treatment with anticoagulants, may reduce the risk of recurrent VTE (NNTB = 14) from 3 months to 37.2 months of follow-up. Moderate-certainty evidence suggests there is no additional risk of major bleeding, mortality, PE or adverse events in the same setting. It is uncertain if antiplatelet agents in addition to BMP, when compared to BMP alone, for the treatment of acute DVT may reduce the risk of post-thrombotic syndrome (PTS) but increase the risk of adverse events until 6 months of follow-up (very low-certainty evidence). There was no information provided for recurrent VTE or PE for the treatment of acute DVT.

Caveat

Some of the included studies presented a high risk of bias and so reduced the level of evidence presented. The follow up time for the studies ranged from 3 to 37 months and may have limited the analysis for the long-term time point and impacted data for chronic complications of DVT such as PTS. All included studies were conducted and published more than 10 years ago (from 1978 to 2012) and there have been some changes in what is considered BMP for the treatment of DVT episodes.

Context

VTE is the third most common cardiovascular disease in the world and is a growing public health problem, largely due to an ageing population. Platelets are the principal effector cells for haemostasis, coagulation and thrombosis that are unique to mammals, and are therefore deeply related to thrombus formation in DVT. Because antiplatelet agents act in Virchow's triad as inhibitors of clot formation, they may be a complement to the current treatment for DVT.

Cochrane Systematic Review

Flumignan CDQ, Nakano LCU, Baptista-Silva JCC, Flumignan RLG. Antiplatelet agents for the treatment of deep venous thrombosis. Cochrane Database of Systematic Reviews 2022, Issue 7. Art. No.: CD012369. DOI: 10.1002/14651858.CD012369.pub2. This review contains 6 trials in the review with a total of 1,625 participants.

Pearls No. 706, August 2022, written by Assoc Professor Vanessa MB Jordan.

Systematic review link:

<https://www.cochranelibrary.com/cdsr/doi/10.1002/14651858.CD012369.pub2/full>