COCHRANE PRIMARY HEALTH CARE FIELD

PEARLS Practical Evidence About Real Life Situations

Low dose aspirin is effective for secondary prevention of thrombosis in patients with polycythemia vera

Clinical question	How effective and safe is low-dose aspirin for long-term primary and secondary prophylaxis of arterial and venous thrombotic events in patients with polycythaemia vera (PV) and essential thrombocythaemia (ET)?
Bottom line	Compared to placebo in patients with PV and no clear indication or contraindication to aspirin, low-dose aspirin reduces the risk of fatal thrombotic events, without an increased risk of major bleeding[1]. Given the available evidence and until new data are published, aspirin treatment is suggested for patients with no clear indication or contraindication to aspirin. No studies on the effects of low-dose aspirin in patients with ET have been published.
Caveat	The reduction in risk of fatal thrombotic events was not statistically significant.
Context	PV and ET are chronic myeloproliferative disorders with an increased risk of arterial and venous thrombosis, as well as bleeding. Based on the estimated individual risk of thrombotic and bleeding complications, different therapeutic strategies are available: phlebotomy for PV or platelet apheresis for ET, cytoreductive therapy (e.g. hydroxyurea, anagrelide, interferon-a) and aspirin to prevent platelet aggregation[1]. However, long-term administration is associated with an approximately two-fold increase in the risk of major upper gastrointestinal bleeding (one to two bleeding events per 1000 patients per year), and with an absolute excess of haemorrhagic strokes of one to two per 10,000 patients[2,3].
Cochrane Systematic Review	Squizzato A et al. **Antiplatelet drugs for polycythaemia vera and essential thrombocythaemia.** Cochrane Reviews 2008, Issue 2. Art. No: CD006503. DOI: 10.1002/14651858.CD006503.pub2. This review contains 2 trials involving 630 participants.
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[1]. Campbell PJ et al. Haematology/the Education Program of the American Society of Haematology 2005 ;1 :201-208.

[2].Harrison CN et al. NEJM 2005 ;353 :33-45.

[3]. Landolfi R et al. NEJM 2004 ;350 :114-124.