



ORAL ANTIPLATELETS

Top tips for MURs

- Check that patient has had annual renal and liver function tests (monitor more frequently in high risk patients)
- Ensure that tablets are taken with or after food (aspirin & dipyridamole)
- Counsel patient on signs / symptoms that need referral (see red flags below)
- Counsel patient on common side effects (see below)
- Counsel patient on why taking medication and length of treatment
- Review how long patient has been on clopidogrel (4 weeks for STEMI; 12 weeks NSTEMI; maximum 12 months unless specific indication to continue)
- Counsel patient on reducing alcohol intake to within safe limits (2units/day for women & 3units/day for men per week)
- Counsel patient on healthy eating, exercise & weight loss (if BMI > 25kg/m²) - reduce saturated fat and salt intake, avoid salt substitutes, increase oily fish intake, complete a minimum of 30 minutes of moderate intensity physical activity, five times a week, reduce caffeine intake to no more than 5 cups a day and recommend 5 portions of fruit and vegetables a day
- Advise patient who smokes of the benefits of stopping smoking and how to access enhanced smoking cessation services in community pharmacy and GP practices
- Advise patient to discard dipyridamole modified release capsules 6 weeks after opening

What are oral antiplatelets used for?

Oral antiplatelets are licensed for use in the secondary prevention and treatment of thrombotic cerebrovascular or cardiovascular disease and prophylaxis of thromboembolism associated with prosthetic heart valves.

Red flags that need referral

- Chronic gastrointestinal bleeding, persistent vomiting or iron deficiency anaemia
- Any heaviness in the centre of your chest, triggered by effort or emotion, any fatigue, water retention or hypotension
- Severe itching or rash
- Pregnancy, as risk of teratogenity and risk of haemorrhage
- Breastfeeding as present in milk and a risk of toxicity in the infant

How do oral antiplatelets work?

Aspirin (low dose)	Suppresses the formation of thromboxanes in platelets resulting in reduction of platelet aggregation and reduces the likelihood of a clot formation
Adenosine diphosphate receptor inhibitors (Clopidogrel; Prasugrel & Ticagrelor)	Inhibits the platelet cell membrane receptors responsible for aggregation of platelets by blocking the glycoprotein pathway, which prevents arterial and venous thrombosis and blocks platelet activation
Dipyridamole	Inhibits thrombus formation by acting as a thromboxane inhibitors preventing platelet aggregation and vasoconstriction. It also has an effect on phosphodiesterase enzymes preventing conversion of cyclic AMP to inactive 5 AMP, which blocks the platelet response to adenosine diphosphate

What are the common side effects to look out for?

Gastro-intestinal disturbances including discomfort, nausea, diarrhoea, occasionally bleeding & ulceration	Take medication with milk or food as may reduce symptoms. Refer to GP for change of formulation, medication or addition of low dose gastro-protection (e.g. PPI like omeprazole) if persistent. Do not suggest changing aspirin to enteric coated preparation or clopidogrel, as no evidence for benefit
Rashes / angioedema,	Refer immediately for medical assistance as potentially life threatening
Bronchospasm, jaundice, abdominal pain & renal failure	Refer to GP – medication needs to be stopped
Headache, dizziness, vertigo and insomnia	Refer to GP if a problem



Potential drug interactions? – See BNF Appendix 1: Interactions for more details

- Dipyridamole enhances the effects of adenosine and anticoagulants, with the later requiring closer INR monitoring
- An increased risk of bleeding with concomitant use of dipyridamole and clopidogrel or prasugrel
- Clopidogrel and ticagrelor effects possibly reduced by antibacterials, antidepressants, antiepileptics, antifungals, antivirals and ulcer healing drugs (especially omeprazole or esomeprazole with MHRA recommending use of lansoprazole when concomitant use is required)
- Clopidogrel effects possibly enhanced by anticoagulants with a potential increased risk of bleeding
- An increased risk of bleeding with concomitant use of aspirin and NSAIDs, anticoagulants, antidepressants and methotrexate

Where can you find more information?

- Antiplatelets – BNF sub-section 2.9
- Coronary heart disease distance learning packs can be found on WCPPE website (<http://www.wcppe.org.uk>)
- NICE guidance on use of clopidogrel and modified release dipyridamole in prevention of occlusive vascular events and prasugrel for treatment of acute coronary syndromes can be found on NICE website (<http://www.nice.org.uk>)

