



NSAIDs

Top tips for MURs

- Check that the patient understands why NSAID has been prescribed and check if still indicated
- Advise patient that side effects associated with NSAIDs are dose related so should be used for the shortest length of time and at the lowest dose necessary to control symptoms
- Advise patient that NSAIDs can increase blood pressure. Check that patient has had their blood pressure monitored within two weeks of initiation of therapy and after any dose increase
- Ensure patient is on the correct NSAID depending on their cardiovascular/gastrointestinal risk
- Check that patient has had annual renal and liver function tests (monitor more frequently in high risk patients e.g. in the elderly or patients with co-morbid conditions)
- Counsel patient on signs / symptoms that need referral (see red flags below)
- Counsel patient on common side effects (see below) and how they should be managed
- If co-prescribed proton pump inhibitor counsel patient on how it should be taken and why it is important
- Signpost patient with chronic pain to self help leaflets and websites e.g. Arthritis care or expert patients programme
- Ensure that NSAIDs are taken in divided doses throughout the day, with or after food
- Advise patient not to take any OTC aspirin / ibuprofen or use topical NSAIDs with their medication
- Advise patient that the full analgesic effect of medication will be seen within a week, but it will take up to three weeks to exhibit the anti-inflammatory effect
- Counsel patient on healthy eating, exercise and weight loss (if BMI > 25kg/m²) - reduce saturated fat and salt intake, increase oily fish intake, complete a minimum of 30 minutes moderate intensity physical activities, five times a week. Signpost to local exercise schemes e.g. exercise on referral (information can be found on local authority website)
- Advise patient on non-pharmacological interventions to manage pain e.g. weight management, physiotherapy, exercise, TENS machines

What are NSAIDs used for?

NSAIDs are licensed for use in the treatment of inflammatory conditions (arthritis and other musculoskeletal disorders) and generalised pain relief (migraine, dental pain, post-operative pain, menorrhagia and gout).

Red flags that need referral

- Black stools or dark, coffee ground vomiting suggesting chronic gastrointestinal bleeding
- Symptoms of iron deficiency anaemia (suggesting chronic gastrointestinal bleeding) e.g. fatigue, weakness, dizziness, pale skin, chest pain, palpitations, shortness of breath
- Progressive unintentional weight loss or difficulty swallowing
- Persistent vomiting
- Patients who are at increased risk of gastrointestinal side effects from NSAIDs e.g. patients aged 65 years and over, patients with significant past medical history or who are co-prescribed medications such as aspirin, anticoagulants, SSRIs, corticosteroids for assessment on whether co-prescribing of gastroprotection is required
- Patients over 55 years old with unexplained, persistent recent onset dyspepsia
- Pregnancy & breastfeeding
- Swollen ankles or feet

What are the common side effects to look out for?

Gastro-intestinal disturbances including discomfort, nausea, diarrhoea, occasionally bleeding & ulceration	Take medication with milk, water or food as may reduce symptoms. Refer to GP for change of formulation, medication or addition of gastro-protection if persistent. Refer immediately to GP if evidence of gastrointestinal bleeding
Rashes, angioedema, bronchospasm	Refer to GP – NSAID needs to be stopped
Hepatic reactions – jaundice, abdominal pain & renal failure	Refer to GP – NSAID needs to be stopped
Increased blood pressure, CV events, hyperkalaemia & fluid retention	Refer to GP for review of NSAID therapy
Headache, dizziness, vertigo and insomnia	Refer to GP if a problem
Reduced female fertility (long term use)	Advise patient that fertility problems are reversible on stopping treatment



How do NSAIDs work?

NSAIDs work by inhibiting the enzyme cyclo-oxygenase, which is involved in the production of inflammatory prostaglandins. This results in reduction of inflammation, reduced temperature and an analgesic effect.

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

- Methotrexate - there is increased risk of methotrexate toxicity due to reduction in the excretion of methotrexate. Methotrexate levels should be monitored closely when initiating, changing dose or discontinuing NSAID treatment
- Lithium - there is increased risk of lithium toxicity with NSAID use. Lithium levels should be monitored closely when initiating, changing dose or discontinuing NSAID treatment. Avoid concomitant use
- Diuretics and ciclosporin - there is increased risk of nephrotoxicity with NSAID use (a prescription for diuretics may indicate a diagnosis of heart failure; NSAIDs can antagonise the diuretic effect and worsen symptoms of heart failure)
- Aspirin, antidepressants and anticoagulants - there is an increased risk of bleeding and concomitant use should be avoided, if this is not possible gastroprotection should be considered

Where can you find more information?

- NSAIDs – BNF sub-section 10.1.1 Non-steroidal anti-inflammatory drugs
- Musculoskeletal disorders (level 1 & 2) distance learning packs can be found on WCPPE website (<http://www.wcppe.org.uk>)
- NICE guidance on management of rheumatoid arthritis & osteoarthritis can be found on NICE website (<http://www.nice.org.uk>)
- Clinical Knowledge Summaries- NSAID prescribing issues (<http://www.cks.nhs.uk>)
- National Prescribing Centre (<http://www.npc.nhs.uk>)

