Doncaster & Bassetlaw Medicines Formulary

Section 10.1.1: Non-Steroidal Anti-Inflammatory Drugs (NSAIDs)

Ibuprofen 200mg and 400mg Tablets
Ibuprofen 100mg/5ml Liquid
Celecoxib 100mg and 200mg Capsules
Naproxen 250mg and 500mg Tablets

Mefenamic Acid 250mg Capsules
Mefenamic Acid 500mg Tablets

Diclofenac 25mg, 50mg and 100mg Suppositories
Diclofenac 75mg Injection

Ketorolac 10mg and 30mg Injection

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Prescribing Guidance:

NSAIDs – General Prescribing Points:

- In osteoarthritis (OA), **Paracetamol** should be used as a first-line analgesic
- Single doses of NSAID can be useful in acute musculoskeletal pain, dysmenorrhoea, and migraine
- Regular doses of NSAIDs can be useful in renal colic, low back pain and rheumatoid conditions e.g. rheumatoid arthritis (RA)
- **Where a NSAID is prescribed, start at the lowest effective dose for the shortest time possible**
- See sections below regarding use of NSAIDs in patients with asthma or GI ulceration
- NSAIDs should be used with caution in patients with:
    - Renal impairment (see below)
    - Hepatic impairment
    - Congestive heart failure (see below)
- Always check creatinine before commencing NSAIDs particularly in the elderly, but particularly closely when NSAIDs are combined with other drugs that can also cause deterioration in renal function (e.g. ACE inhibitors)
- As NSAIDs have been demonstrated to induce or exacerbate colitis, they should not be used in patients with Inflammatory Bowel Disease.

Choice of NSAID:

Ibuprofen (at a dose of 400mg TDS to QDS), **naproxen** or **celecoxib** should be the NSAIDs of choice.

Diclofenac should be reserved for when non-oral formulations are required, in courses of limited duration. **Mefenamic acid** should be reserved for episodes of dysmenorrhoea. Injectable NSAIDs (**diclofenac** or **ketorolac**) should only be prescribed for short-term acute pain management, where the duration should be limited to two days.

NSAIDs & Asthma:

A significant number of asthmatic patients (around 5%) experience worsening of symptoms following NSAID use (typically, bronchospasm) – see CSM warning in BNF. It is recommended that asthmatic patients should be treated as shown in the table below.

Previously taken Aspirin or other NSAID with no worsening of asthma	*Treat as non-asthmatic*
Never taken Aspirin or other NSAID	*Use NSAID but monitor first few doses*
Previously had allergic reaction to Aspirin or other NSAID	*AVOID NSAIDs*

NSAIDs & GI Ulceration:

NSAIDs should never be prescribed for patients with active peptic ulceration or GI bleed.

If prescribing an NSAID for a patient with any of the following risk factors:

- previous history of GI ulceration, bleed or perforation OR
- anticoagulant therapy (e.g. warfarin) OR
- regular glucocorticosteroid therapy (>7.5mg prednisolone daily)

Lansoprazole 15mg once daily should be co-prescribed as gastroprotection.

These risk factors are considered to be major and are entered in the table below in bold text.

In addition, any patient who has any two of the other (minor) risk factors listed below should also be prescribed lansoprazole.

Previous History of Ulceration, Bleed or Perforation
Patients taking Anticoagulant Therapy
Patients taking Corticosteroid therapy
Patients taking Antiplatelet therapy (e.g. low dose Aspirin)
Patients not taking food orally for 48 hours or greater
Previous History of NSAID-related dyspepsia
Previous History of Cardiovascular Disease, Renal or Hepatic Impairment, Diabetes or Hypertension
Patients taking SSRI antidepressants
Patients aged 65 years or over

See also Section 1.3 (Gastroprotection)

Cardiac & Renal Effects of NSAIDs:

Despite all the publicity surrounding the GI effects of the NSAIDs, the cardiac and renal effects can be just as important, particularly in elderly patients.

Key Points:

- Patients with established renal dysfunction should not be prescribed NSAIDs
- Creatinine clearance and serum potassium levels should be monitored throughout NSAID use, particularly if the patient is taking other medication which may worsen renal function (e.g. ACE inhibitors)
- NSAIDs should not generally be used in patients with heart failure as they cause fluid retention and worsen the condition. However, where NSAIDs are positively indicated (e.g. in acute gout) they can be used in short courses for those patients with mild, stable heart failure. The patient should be carefully monitored and counselled to inform the medical staff (who should stop the drug) if any worsening of oedema or breathlessness occurs. These patients should not be discharged on NSAIDs
- NSAIDs should be used with caution in patients with hypertension and careful monitoring of blood pressure should be undertaken. If a significant rise is seen appropriate action should be taken – cessation of the NSAID or initiation of antihypertensive therapy