Derbyshire Medicines Management, Prescribing and Guidelines
DERBYSHIRE PRIMARY CARE FORMULARY

Chapter 10: MUSCULO-SKELETAL AND JOINT DISEASES
Updated: August 2023

The following prescribing guidelines are relevant to the Musculo-skeletal and joint diseases chapter and can be found here

- Hydroxychloroquine prescribing guideline
- Management of Low back pain and Sciatica in primary care

Other relevant resources

- Management of Osteoarthritis – NICE NG226 Visual summary
- NG219 Gout: diagnosis and management
- Visual summary - management of gout; long-term management of gout with ULTs

10.1 Drugs used in rheumatic diseases and gout

10.1.1 Non-steroidal anti-inflammatory drugs (NSAIDs)

For treatments of minor, short-term medical conditions such as headaches, period pain, mild fever and back pain, patients are encouraged to self-care with over-the-counter preparations and lifestyle changes. Simple analgesics to be used 1st line where possible.

Standard NSAIDs

Ibuprofen Tablets 200mg, 400mg, Oral suspension (sugar free) 100mg/5ml
1st *line – low cardiovascular (CV) risk at < 1200mg per day*

Naproxen Tablets 250mg, 500mg *Use plain tablets not e/c*
2nd *line – lowest CV risk ≤ 1000mg per day*

1. For NSAIDs the cardiovascular (CV) and gastrointestinal (GI) risk of each patient should be assessed individually and the balance between benefit and risk carefully considered before starting treatment with any NSAID. Treatment with NSAIDs should be continued for the **shortest time and at the lowest dose necessary** to control symptoms. A Danish study suggests that the increased relative risk could be largely independent of the duration with harm within the first few weeks of treatment.
2. Two oral NSAIDs (including low dose aspirin) increase GI risk and should not be routinely given concurrently.
3. Standard NSAID + PPI e.g. lansoprazole 15mg is preferred option in high-risk individuals where gastro-protection is required. Where patients have swallowing difficulties/PEG tubes Lansoprazole orodispersible is the preferred choice. See here for local advisory guidance on when to initiate a PPI with an NSAID (or antiplatelet).
4. The MHRA June 2015 have reviewed the safety of high-dose ibuprofen and have concluded that there is an increased cardiovascular risk associated with high dose ibuprofen (≥2400mg/day), which is similar to that seen with COX-2 inhibitors and diclofenac.
5. Cardiovascular risk with diclofenac is similar to that of the selective COX-2 inhibitors. Consistent with COX-2 inhibitors, diclofenac is now contraindicated in those with: ischaemic heart disease; peripheral arterial disease; cerebrovascular disease; and established congestive heart failure (New York Heart Association [NYHA] classification II–IV). MHRA June 2013. It is classified **GREY**.
6. Diclofenac IM is an option in the management of acute renal colic. If contraindicated strong opioids (e.g. morphine) should be considered.
7. MHRA June 2023 NSAIDs: potential risks following prolonged use after 20 weeks of pregnancy.
   - systemic (oral and injectable) NSAIDs are contraindicated during the last trimester (after 28 weeks) of pregnancy due to the risk of premature closure of the ductus arteriosus and renal dysfunction in the fetus and due to prolongation of maternal bleeding time and inhibition of uterine contractions during labour.
   - avoid prescribing systemic NSAIDs from week 20 of pregnancy unless clinically required and prescribe the lowest dose for the shortest time in these circumstances.

- antenatal monitoring for oligohydramnios should be considered if the mother has been exposed to NSAIDs for several days after week 20 of pregnancy; the NSAID should be discontinued if oligohydramnios is found or if the NSAID is no longer considered to be clinically necessary.

Refer to appendix 1 for appropriate use of NSAIDs

COX-2 Inhibitors
These are **GREY** drugs and should rarely be used. If a COX-2 inhibitor is required etoricoxib (avoid in people with uncontrolled hypertension) is currently the cost-effective choice.

10.1.2 Corticosteroids
10.1.2.2 Local corticosteroid injections

Methylprednisolone acetate injection 40mg/ml, 1ml, 2ml, 3ml vials
Methylprednisolone with Lidocaine 1ml, 2ml vials
Triamcinolone acetonide 10mg/1ml vial, 40mg/1ml vial

10.1.3 Drugs that suppress the rheumatic disease process
The following drugs are **AMBER** i.e. may be prescribed by GPs under a shared care agreement. Shared care guidelines are available here

Azathioprine
Ciclosporin
Leflunomide
Mercaptopurine
Methotrexate (UHDB- oral only; CRH- oral/ SC injection)
Penicillamine
Sulfasalazine (Salazopyrin)
e/c tablets 500mg (licensed for ulcerative colitis, Crohn's disease & rheumatoid arthritis)
tablets 500mg (licensed for ulcerative colitis and Crohn's disease)

Hydroxychloroquine is **GREEN** after consultant/specialist initiation. See local prescribing guideline.

Methotrexate
- Methotrexate is normally given as a weekly dose.
- Prescribe only 2.5mg strength tablets for oral methotrexate.
- It is good practice to state the day of the week on the prescription and to give the dose as number of tablets and mgs e.g. 4 tablets (10mg).
- Folic acid is usually given to reduce the possibility of methotrexate toxicity at a dose of 5mg once weekly, avoiding the day of methotrexate as recommended by specialist.
- MHRA Sept 2020
  - ensure patient is able to understand and comply with once-weekly dosing
  - consider the patient's overall polypharmacy burden
  - decide with patient which day of the week to take methotrexate and note this down on prescription
  - inform patient/caregivers of the potentially fatal risk of accidental overdose
  - advise patients of the need to promptly seek medical advice if they think they have taken too much
  - utilise methotrexate patient card
- MHRA August 2023 Methotrexate: advise patients to take precautions in the sun to avoid photosensitivity reactions. Advice for healthcare professionals:
  - photosensitivity reactions (which include phototoxicity, where a drug is activated by exposure to UV light and causes damage to the skin that can look and feel like a sunburn or a rash) are known side effects of methotrexate treatment and can occur with both low-dose and high-dose treatment.
  - reactions manifest as severe sunburn such as rashes with papules or blistering, with some patients reporting swelling; rarely, photosensitivity reactions have contributed to deaths from secondary infections.

It is the prescriber's responsibility to ensure systems are in place to ensure safe disposal of any cytotoxic waste. The purple lid waste bins can be prescribed on an FP10 and disposed of either by the GP practice.

Hydroxychloroquine

MHRA Feb 2022- Hydroxychloroquine, chloroquine: increased risk of cardiovascular events when used with macrolide antibiotics; reminder of psychiatric reactions.

10.1.4 Gout and cytotoxic-induced hyperuricaemia

Colchicine tabs 500microgram
Allopurinol tabs 100mg, 300mg
Febuxostat tabs 80mg *2nd line for use in patients where allopurinol is contraindication or not tolerated.*

1. Febuxostat (NICE NG219)- prescribers should note MHRA June 2012 advice regarding stopping if signs or symptoms of serious hypersensitivity (e.g. serious skin reactions or systemic hypersensitivity)
2. MHRA May2023 – Caution if prescribing febuxostat in patients with pre-existing major cardiovascular disease, in those with evidence of high urate crystal and tophi burden, or those initiating urate-lowering therapy.
   - in patients with pre-existing major cardiovascular diseases, febuxostat therapy should be used cautiously, particularly in those with evidence of high urate crystal and tophi burden or those initiating urate-lowering therapy
   - following initiation of febuxostat, prescribers should titrate the febuxostat dose to minimise gout flares and inflammation
   - note that clinical guidelines for gout (see, for example, NICE guideline 219 – Gout: diagnosis and management) recommend that allopurinol should be offered as first-line treatment for people with gout who have major cardiovascular disease

10.1.5 Other drugs for rheumatic diseases

No medicine is recommended in this section. Glucosamine has been classified as **Do Not Prescribe (DNP)** and is not recommended or commissioned within Derbyshire. Existing patients on treatment should be reviewed with a view to stopping treatment at the next routine appointment.

10.2 Drugs used in neuromuscular disorders

10.2.1 Drugs that enhance neuromuscular transmission

Follow consultant advice

10.2.2 Skeletal muscle relaxants

Baclofen tabs 10mg *(**GREEN** after consultant recommendation)*
Diazepam tablets 2mg, 5mg, 10mg
Tizanidine tablets 2mg *(**GREEN** after consultant initiation following a 4-month period of dose stabilisation, response assessment and LFT monitoring)*

Diazepam

1. Given the risks associated with the use of benzodiazepines, patients should be prescribed the lowest effective dose for the shortest time possible. Maximum duration of treatment should be 4 weeks, including the dose-tapering phase. See MHRA December 2014
2. Benzodiazepines and opioids: reminder of risk of potentially fatal respiratory depression. Only prescribe together if there is no alternative and closely monitor patients for signs of respiratory depression. MHRA March 2020

Quinine

1. Quinine is toxic in over dosage and accidental fatalities have occurred. Quinine salts 200-300mg at bedtime are only effective in reducing the frequency of nocturnal leg cramps by about 25% in ambulatory patients. **It is generally not recommended for treating idiopathic leg cramps due to poor benefit-to-risk ratio.** It may take up to 4 weeks for improvement to become apparent. Treatment should be stopped if there is no improvement after this time. Treatment should be interrupted at intervals of approximately 3 months to assess the need for further quinine treatment.
2. Quinine is generally not recommended for treating idiopathic leg cramps due to poor benefit-to-risk ratio. Consider a trial of quinine if:
   - treatable causes excluded and self-care measures fail, and
   - leg cramps are very painful and frequent, and affect the person's quality of life, and

- the person has no medical conditions or drug interactions that increase the risk of quinine use, and adverse effects are discussed before prescribing and are carefully monitored.

3. MHRA November 2017 warns that quinine has dose-dependent QT-interval-prolonging effects and should be used with caution in patients with risk factors for QT prolongation or in those with atrioventricular block. Also quinine may increase the levels of phenobarbital and of carbamazepine. Patients should be monitored closely during concomitant use of quinine with these agents.
4. Quinine bisulfate is significantly more expensive.

10.3 Drugs for the relief of soft-tissue inflammation

10.3.1 Enzymes

No drug is recommended for this section

10.3.2 Rubefacients and other topical antirheumatics

All Rubefacients have been classified by JAPC as **Do Not Prescribe (DNP)** due to limited evidence. Patients can self-care and purchase over the counter if required. Examples include Movelat, Algesal & Transvasin Heat Rub.

Ibuprofen gel 5% (**Fenbid**) 100g
Diclofenac diethylammonium 1.16% (Voltarol Emulgel) 100g

1. For Pharmacological management of osteoarthritis use paracetamol first line, topical NSAID second line. See Pharmacological Management of osteoarthritis
2. Ibuprofen 10% gel provides the same dose compared with ibuprofen 5% gel, when using the recommended amount, but is more expensive.
3. Risk of photosensitivity reactions associated with topical ketoprofen.

Appendix 1 Appropriate NSAID use- Options to reduce risk of a serious GI event

1. Don't use in the first place

Most of the prescribing of NSAIDs is for osteoarthritis where non-drug therapies are recommended as first choice treatments.

2. If you must use NSAIDs then use cautiously

- Consider topical NSAID if appropriate
- Use the least toxic agents: ibuprofen first-line and then naproxen; avoid piroxicam
- Use at the lowest effective dose and for the shortest duration
- Concomitant use with low-dose aspirin should be avoided if possible.
- Review regularly to ensure NSAID treatment is still appropriate
- Consider co-morbidities and concomitant medications

3. Use gastroprotection in high-risk individuals taking NSAIDs

See here for local advisory guidance on when to initiate a PPI with an NSAID (or antiplatelet)

4. Ensure patients receive appropriate counselling

Before starting NSAIDs patients should be counselled on the adverse effects associated with NSAIDs including GI, cardiovascular and renal effects. Advise patients to take an NSAID with or after food. If lansoprazole is co-prescribed for gastric protection ensure this is taken at least 30minutes before food.