Chapter 10: MUSCULO-SKELETAL AND JOINT DISEASES
Updated: August 2019

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 painkillers 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

**Indometacin**
Capsules 25mg, 50mg, Suppositories 100mg
1st line for acute gout

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 eg. 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 antplatelet)

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 BROWN.

6. Diclofenac IM is an option in the management of acute renal colic. If contraindicated strong opioids (e.g. morphine) should be considered.

Refer to appendix 1 for appropriate use of NSAIDs

**COX-2 Inhibitors**

These are BROWN drugs and should rarely be used. If a COX-2 inhibitor is required Celecoxib is the preferred cost-effective choice locally

10.1.2 Corticosteroids

10.1.2.2 Local corticosteroid injections

**Methylprednisolone acetate** (Depo-Medrone) injection 40mg/ml, 1ml, 2ml, 3ml vials
Depo-Medrone with Lidocaine 1ml, 2ml vials
Triamcinolone acetonide 10mg/1ml amp, 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:
- North Derbyshire – oral or subcutaneous injection
- South Derbyshire – oral preparations only
Penicillamine
Sodium aurothiomalate (discontinued, no new patient to be started)
Sulfasalazine e/c tablets 500mg (licensed for ulcerative colitis, Crohn’s disease and additionally for rheumatoid arthritis)
Sulfasalazine tablets 500mg (licensed for ulcerative colitis and Crohn’s disease)
Hydroxychloroquine – GREEN after consultant/specialist initiation

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.

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 or homecare provider. In North Derbyshire, waste disposal and the injection are provided through the homecare provider.

10.1.4 Gout and cytotoxic-induced hyperuricaemia

Colchicine tabs 500microgram
Allopurinol tabs 100mg, 300mg
1. For people with mild symptoms consider self-care measures- rest and elevate limb, apply ice pack or a pack of frozen peas wrapped in a towel to joint area for about 20 minutes, repeated as required) rather than any specific drug treatment.
2. Febuxostat is GREEN 2nd line for use in patients where allopurinol is contraindicated or not tolerated as per NICE TA 164. Prescribers should note MHRA June 2012 advice regarding stopping if signs or symptoms of serious hypersensitivity (e.g. serious skin reactions or systemic hypersensitivity); and MHRA July 2019- Avoid treatment with febuxostat in patients with pre-existing major cardiovascular disease (for example, myocardial infarction, stroke, or unstable angina), unless no other therapy options are appropriate.
3. Lesinurad is BLACK- not recommended for the treatment of chronic hyperuricaemia in people with gout as per NICE TA506.

10.1.5 Other drugs for rheumatic diseases
No medicine is recommended in this section. Glucosamine has been classified as a BLACK drug 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
No drug is recommended for this section – follow consultant advice
10.2.2 Skeletal muscle relaxants

Diazepam tablets 2mg, 5mg, 10mg
Baclofen tabs 10mg (GREEN after consultant recommendation)

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.

An article in BMJ 2017 describes a study of UK GP prescribing published in JAMA, which found long term use of quinine is associated with increased mortality.

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.

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 BLACK due to limited evidence. Patients can self-care and purchase over the counter if required. Examples include Movelat, Algesal & Transvasin Heat Rub.

Fenbid (Ibuprofen gel 5%, 10%) 100g
Ketoprofen gel 2.5%, 50g, 100g

1. Risk of photosensitivity reactions associated with topical ketoprofen.
2. For Pharmacological management of osteoarthritis use paracetamol first line, topical NSAID second line. See local guidance Management of non-malignant chronic pain in primary care.

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 and simple analgesics such as paracetamol are recommended as first choice treatments.

2. If you must use NSAIDs then use cautiously

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

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)