Medicines Optimisation Update

Non-steroidal anti-inflammatory drugs

Partners in improving local health

NHS Cumbria Clinical Commissioning Group

What this includes:

1. NSAIDs (Non-steroidal anti-inflammatory drugs): ADQ (Average Daily Quantities)/ STAR-PU (Specific Therapeutic group Age-sex Related Prescribing Units). Targeting prescribing of NSAIDs to appropriate patients.
2. NSAIDs: Ibuprofen and Naproxen % items: Ensuring that where an NSAID is needed, the safest and most cost-effective option is prescribed.

Identifying the problem:

- A care bundle to support this update is available on the NECS medicines optimisation website: http://medicines.necsu.nhs.uk/guidelines/cumbria-guidelines/
- PrescQIPP audit template: https://www.prescqipp.info/nsaids/category/175-nsaids
- RAIDR patient safety query set, RAIDR, North of England Commissioning Support Unit. https://nww.raidr.nhs.uk/

Suggested actions:

Background: An estimated 20% of general practice consultations are for musculoskeletal problems. One study has shown that 45% of NSAID prescriptions are used for treating musculoskeletal pain in osteoarthritis (OA), particularly in the elderly. NSAIDs have been shown to be responsible for 11% of preventable drug-related hospital admissions.

New patients that may be prescribed a NSAID:

- Is an oral NSAID really needed, and if not, is there a suitable alternative? Please consult the relevant NICE guidance for the patient's condition. if appropriate, consider non-pharmacological treatments as an alternative or adjunct.
- If an NSAID is necessary, an NSAID with the lowest cardiovascular, gastro-intestinal and renal risk should be chosen. Ibuprofen dose of less than 2.4g and Naproxen are first line options. Naproxen or low dose ibuprofen are associated with a lower cardiovascular risk than the Cyclo-oxygenase-2 (COX-2) inhibitors and diclofenac and are the treatments of choice on safety (and cost) grounds.
- COX-2 inhibitors, diclofenac and ibuprofen (2.4g daily or higher) are associated with increased risk of thrombotic events. Diclofenac has been associated with an increased risk of recurrent myocardial infarction from the beginning of treatment. These options should ideally be avoided.
- Is there an obvious contra-indication to an oral NSAID?
- Is the patient already taking a NSAID? For example, use of over-the-counter (OTC) ibuprofen. Check the current dosage and usage: could this NSAID be titrated to control pain?
- Discuss with the patient that risk of adverse effects can be reduced by using the lowest effective dose for the shortest duration necessary. Consider prescribing as an acute when initiating a NSAID and review continued need/adverse events after ONE month.
- Is gastro-protection required? A suitably licensed gastro protection may be co-prescribed for patients at a high risk of a GI bleed e.g. over 45s and/or long-term use in osteoarthritis, rheumatoid arthritis or persistent low back pain.
- Consider closer monitoring for patients at higher risk of adverse effects e.g. elderly, cardiovascular disease, renal insufficiency or gastrointestinal conditions. NSAIDs should only be prescribed for patients at risk of renal impairment/failure (especially the elderly) where this is unavoidable.
- Prescribe on repeat only if ongoing need demonstrated; set next (and regular) review date(s). Is there a reason for a more frequent review of the continued need for a NSAID?
- Are there potentially hazardous interactions with other drugs? E.g. angiotensin-converting enzyme (ACE) inhibitors or angiotensin-II receptor antagonists (AIIRA).

Partners in improving local health

Medicines Optimisation Update
Non-steroidal anti-inflammatory drugs

NHS Cumbria Clinical Commissioning Group

Suggested actions:

Patients currently prescribed a NSAID on repeat prescription:

- Practices should regularly review their NSAID prescribing, especially in individuals who are at a higher risk of gastro-intestinal (GI) and cardiovascular (CV) morbidity and mortality. Consider switching to a lower risk NSAID where appropriate.

Medication review of NSAIDs should consider:

- Is a NSAID still necessary?
- Have alternatives and adjuncts been explored with the patient?
- Is the NSAID prescribed an appropriate choice, based on the patient's risk of adverse effects e.g. elderly, cardiovascular disease, renal insufficiency or gastro-intestinal conditions?
- Should a proton pump inhibitor (PPI) or other gastro protection be co-prescribed to reduce the risk of adverse events if a NSAID is still indicated?
- Have all risks (including co-prescribed medication) been considered, discussed with the patient, and documented?
- Is the lowest effective dose being used? Are the risks of potential side-effects being monitored?
- When should treatment/dose next be reviewed?

Resources:

- PrescQIPP resources including an audit template, patient review letter and tailored searches for EMIS Web and Vision: https://www.prescqipp.info/nsaids/category/175-nsaids

References:

- NICE Clinical Knowledge Summaries - NSAIDS: http://cks.nice.org.uk/nsaids-prescribing-issues
- NICE KTT13. Non-steroidal anti-inflammatory drugs. January 2015. www.nice.org.uk/advice/ktt13
- NICE Clinical Guideline 177. Osteoarthritis care and management in adults. February 2014. https://www.nice.org.uk/guidance/cg177
- PrescQIPP. Non-steroidal anti-inflammatory drugs. June 2015. (reference password controlled – please contact your Medicines Optimisation pharmacist for reference)
- NICE Clinical Guideline 79. Rheumatoid Arthritis. August 2013.
- https://www.nice.org.uk/guidance/cg79
- NICE Clinical Guideline 88. Low back pain. Early management of persistent non-specific low back pain. May 2009. https://www.nice.org.uk/guidance/cg88
- Schjerning Olsen AM, et al. Duration of treatment with non-steroidal anti-inflammatory drugs and impact on risk of death and recurrent myocardial infarction in patients with prior myocardial infarction. Circulation 2011; 123: 2226-2235.
- Royal College of General Practitioners. Rheumatology and Conditions of the Musculoskeletal System. January 2006.
- http://www.gmcuk.org/3_20_Musculoskeletal_problems_August_2013.pdf_55918582.pdf
- Cutts C, La Caze A. Nonsteroidal anti-inflammatory drugs and potential risks in a convenience sample of general practitioners. Aust Fam Phys 2002; 31: 590-2.
- Howard R, et al. Which drugs cause preventable admissions to hospital? A systematic review. Br J Clin Pharmacol 2006; 63: 136-47.