PrescQIPP Briefing 265: NSAIDs

This bulletin reviews NSAIDs and offers guidance and implementation support resources for organisations considering reviewing NSAIDs from a medicines optimisation or medicines safety perspective.

Key recommendations

- Consider alternatives, such as a topical NSAID, physiotherapy or a different analgesic such as paracetamol or an opioid before prescribing NSAIDs.[1] Be aware that repeated opioid use can lead to dependence and tolerance.[2]
- Ensure that the patient understands that it is unusual for any analgesic to completely eliminate chronic pain. The focus of treatment is on reducing a person's pain and improving their quality of life.[2]
- When an NSAID is needed then prescribe the lowest dose for the shortest duration, e.g. ibuprofen (≤1200mg daily in divided doses) or naproxen (≤1000mg daily in divided doses).[1,3] These are associated with a lower cardiovascular risk than other NSAIDs.[4]
- Choose the NSAID with the lowest cardiovascular, renal and/or GI risk, depending upon the individual patient's risk factors.[3] If more than one product is suitable for an individual patient, choose the product with the lowest acquisition cost.
- Be aware that cyclo-oxygenase-2 (COX-2) inhibitors, diclofenac (150mg daily) and ibuprofen (2.4g daily) are associated with an increased risk of thrombotic events. The increased risk for diclofenac is similar to that of licensed doses of etoricoxib.[4]
- Co-prescribe a proton pump inhibitor (PPI) with the lowest acquisition cost e.g. lansoprazole or omeprazole capsules, for NSAID gastroprotection in patients:[1]
  - With osteoarthritis and rheumatoid arthritis
  - Who are elderly
  - With low back pain, axial spondyloarthritis, psoriatic arthritis and other peripheral spondyloarthritides
  - Who are at high or moderate risk of GI adverse events
- Consider prescribing ibuprofen or naproxen in preference to mefenamic acid in the treatment of menorrhagia.[5] Although only mefenamic acid is specifically licensed for menorrhagia, there are concerns that it is more likely to cause seizures in overdose, and it has a low therapeutic window which increases the risk of accidental overdose.[5]
- Address factors which put patients at higher risk of adverse events, regularly monitor and review treatment, empower patients to KNOW, CHECK, ASK about their medicines and deprescribe NSAIDs through shared decision making.

Supporting Evidence

All NSAIDs (including selective COX-2 inhibitors) have been associated with serious GI toxicity, a small increased risk of thrombotic events (e.g. myocardial infarction and stroke) and rarely precipitating renal failure.[4,6,7] The appropriateness of NSAID prescribing should be reviewed on a routine basis, especially in people who are at higher risk of GI, renal and cardiovascular morbidity and mortality, e.g. older people.[1] Attachment 1 (a medicine safety checklist) and attachment 2 (a review and monitoring checklist) provide information to support NSAID selection in new patients and review and monitoring in existing patients.

Costs and Savings*

*data used NHSBSA Dec 19-Feb 20

- The annual spend on NSAIDs across England and Wales is just over £74 million. Reducing NSAID prescribing by 30% could result in **savings of around £22 million per annum across England and Wales, which equates to £35,853 per 100,000 patients.**
- There are significant differences in cost between NSAID preparations ranging from £2.15 to £77.46 per 28 days.[8]
- Over £8.3 million is spent on mefenamic acid. Ibuprofen and naproxen are both licensed for use in dysmenorrhoea.[4] Switching 50% of mefenamic acid prescriptions to ibuprofen or naproxen could **save £3.7 million annually across England and Wales. This equates to savings of £6,044 per 100,000 patients nationally.**
- Spend on diclofenac is over £3.3 million per annum. Switching 50% of diclofenac prescriptions to ibuprofen or naproxen could provide **savings of £362,045 per annum. This equates to savings of £583 per 100,000 patients across England and Wales.**

References

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Additional resources available	Bulletin	https://www.prescqipp.info/our-resources/bulletins/bulletin-265-nsaids/
	Tools	
	Data pack	https://data.prescqipp.info/views/B265_NSAIDs/FrontPage?:iid=1&:isGuestRedirectFromVizportal=y&:embed=y#2

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