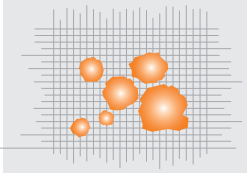
NSAIDs and risk mitigation
—if you really must use them in the elderly



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If you have balanced the risks and benefits of using a NSAID in an older person, then the following points are some risk mitigation strategies.

- **Prescribe low dosages e.g. naproxen 250 mg up to bd, or diclofenac 25 mg bd**
  - For general inflammation/pain 'half doses' are usually adequate. High doses are mainly required for rheumatoid arthritis
  - You do not need to prescribe the slow release forms, which generally mean higher dosages.

- **Renal adverse effects**
  - Renal adverse effects are dose-related
  - Check baseline renal function and repeat in one to two weeks, then one to three monthly depending on the baseline renal function
  - Try to avoid the 'triple whammy'—a diuretic and ACE inhibitor or an angiotensin II antagonist, plus an NSAID
  - Warn the person not to become dehydrated. Keep fluid intake up to at least 1500 mL per day.

- **Gastrointestinal adverse effects**
  - Gastrointestinal effects are dose-related
  - The risk is about 1%/patient/year (a relative risk of four to seven, i.e four to seven times the risk of a GI bleed)
  - For high-risk people prescribe a proton pump inhibitor
  - High risk people are people with at least two of the following criteria:
    - Over 65 years old
    - Previous peptic ulcer disease
    - On a second NSAID (including aspirin)
    - On warfarin or other antithrombotic medicine. *This includes SSRIs and tramadol (antiplatelet effects). The effect of these medicines may be very small when used alone, but is cumulative with NSAIDs*
    - On prednisone
  - There is poor correlation between dyspepsia and the risk of a gastrointestinal bleed (i.e. GI bleeds are usually asymptomatic in that pain does not often precede the bleed)
  - Warn patients to be observant for black stools and report this to their GP immediately.

- **Cardiovascular adverse effects**
  - Increased risk of a cardiovascular event
    - Naproxen at 1000 mg daily is considered the NSAID with the least cardiovascular risk
    - High doses of diclofenac (150 mg daily) is associated with an increased cardiovascular risk
  - Heart failure
    - The relative risk for de novo heart failure is approximately 1.6 (i.e. 1.6 times greater risk)
    - The relative risk for an exacerbation of heart failure is approximately 26 (i.e. 26 times the risk)
  - Blood pressure
    - On average an NSAID may increase blood pressure 5 mmHg—a clinically significant increase
    - Monitor patients monthly for three months.

- **Other**
  - NSAIDs have a number of other adverse effects that are a risk for all people. These include common adverse effects such as:
    - Headache, rash, dizziness, vertigo, gastric upset, raised transaminases
    - Beware of exacerbations of asthma in older people with nasal polyps.

AUTHOR'S CONCLUSIONS: There are times when a NSAID is unavoidable in an older person. When one is necessary start with a low dose, avoid long-acting (high dose) preparations, and monitor gastrointestinal, cardiovascular and renal adverse effects. Record risk mitigation strategies in the person's medical records.

KEY POINTS

- Improved quality of life is the ultimate goal of medicines therapy.
- For some elderly people regular paracetamol is inadequate, an opiate is not suitable/not tolerated and a NSAID is necessary to provide good pain relief, increase mobility, maintain independence, improve mood and generally improve quality of life.
- If a NSAID is necessary for an older person then management of the potential adverse effects is essential.

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