

Prescribing tip for actioning by Practice

Lithium and NSAIDs

Background:

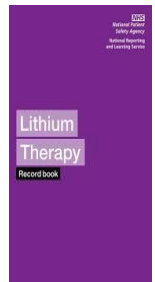
The Medicines Optimisation Team have been made aware of a local incident where lithium was being prescribed and supplied by secondary care but had not been added to the EMIS medication screen as a 'Hospital Only' medicine. The patient was then inadvertently prescribed naproxen (NSAID) and the 'high-risk' intervention did not pop-up on EMIS. This resulted in the patient being admitted to hospital with lithium toxicity. Fortunately, (in this instance) the patient made a full recovery.

Interaction between lithium & NSAIDs:

- NSAIDs inhibit the synthesis of renal prostaglandins, thereby reducing renal blood flow and possibly increasing renal re-absorption of sodium and therefore lithium.
- The magnitude of the rise is unpredictable for any given patient; case reports vary from increases of around 10% to over 400%.
- The onset of effect also seems to be variable - from a few days to several months.
- Risk appears to be increased in those patients who have impaired renal function, renal artery stenosis or heart failure and who are dehydrated or on a low-salt diet.
- NSAIDs should be avoided in primary care as co-prescribing requires (i) more frequent plasma lithium monitoring (initially every few days) and (ii) lithium doses to be reduced appropriately.
- **Some NSAIDs can be purchased without a prescription, so it is particularly important that patients are aware of the potential for interaction.**

NPSA Alert:

Following an NPSA alert in 2009, patients should be issued with a [purple book](#) on the commencement of lithium. Patients are encouraged to take the book to every appointment, to remind GPs and Pharmacists that they are prescribed lithium and to check every time they are prescribed a new medicine, that it is safe to take with lithium.



Action for GP's & Healthcare Professionals:



Please ensure information regarding lithium is added to the EMIS record for each patient, including any prescribing by secondary care. Benefits include, enhancing patient safety and minimising the following potential risks: -

- ✓ **Inadvertent co-prescribing of interacting medications**
A warning will pop up on the EMIS screen when an interaction with lithium is identified.
- ✓ **The potential to miss side effects or not attribute them to lithium therapy**
Upset stomach (particularly at the start of treatment), fine shake (tremor) of the hands, metallic taste in the mouth, weight gain, swelling of the ankles, feeling thirsty and passing a lot of urine.
- ✓ **Missing the signs of lithium toxicity**
Symptoms of lithium toxicity include severe nausea and vomiting, severe hand tremors, confusion and vision changes. If lithium toxicity is suspected, please arrange for urgent lithium levels.
- ✓ **Lithium being missed on admission or transfer to another care setting**

To contact the Medicines Optimisation Team please phone 01772 214302

If you have any suggestions for future topics to cover in our prescribing tips, please contact nicola.schaffel@nhs.net