

Medicines Matters

Issue 29 Date 9th October 2025



Lithium & Nephrogenic Diabetes Insipidus (NDI)

Following on from a local incident, where an 85-year-old lady prescribed lithium since 1990 sadly passed away, the coroner has reported some key issues: -

- The patient was lithium toxic which was not recognised either by the patient or her family
- An expert witness identified the patient had signs of Nephrogenic Diabetes Insipidus (NDI) lasting at least a decade which was not identified by her healthcare providers
- The coroner recognised the difficulties clinicians face in recognising NDI as a potential long term side effect of lithium. This is due to waning use of lithium, that it is not referenced as a side effect in the BNF and monitoring for NDI is not covered in NICE guidelines

It is important to raise awareness and recognise this rare but potentially serious side effect. NDI is not related to type 1 or type 2 diabetes and is estimated to occur in 20-40% of patients on long term lithium therapy.

Protocol

In January 2024 the Medicines Optimisation Team (MOT) collaborated with Lancashire & South Cumbria Foundation Trust (LSCFT) and IT colleagues to produce a lithium prescribing safety protocol. The protocol aims to remind prescribers to check that lithium levels are **in range** and **up to date**, prior to issuing any further prescriptions. This has now been updated to include guidance around NDI. The new Lithium NDI Safety Protocol will be installed onto practice EMIS systems, in the coming weeks, by the Data Quality Team. Should you decide that you do not want the protocol on your practice EMIS system, you can deactivate it once it has been installed.

Updated Shared Care Guidance

The [Lithium Shared Care Guidelines](#) have been updated to include more detailed information about NDI. This will include the requirement, for Primary Care to confirm (at annual review) the following:

- That the patient has the purple booklet and to replace as necessary. The resources to support patients prescribed lithium can be found [here](#) along with a link to the ordering details for Primary Care.
- To provide and document additional verbal and written information at the annual review about side effects and signs of toxicity.
- That any carers who may be involved in care are sighted on red flag symptoms requiring immediate attention.
- To ask questions to assess presence of significant polyuria and polydipsia.

Monitoring for signs of Nephrogenic Diabetes Insipidus (NDI) in Primary Care

The Shared Care Guidelines state that, at each appointment, the patient should be monitored for potential signs of nephrogenic diabetes insipidus - **drinking excessively, producing large volumes of urine, waking in the night thirsty**. If potential signs of NDI are present, please refer to endocrinology. For more information on Lithium related side effects, please see the Lithium Shared Care Guidelines.

For further information, please see [NICE CKS Lithium](#)

Information for patients

Lithium Choice and Medication leaflets for patients and carers/family members involved in care: -

[Lithium carbonate and citrate](#)

[Staying well on lithium](#)