

## Medicines Optimisation Best Practice Guidance for Care Homes – *Bulletin 30*

### Lithium

Lithium is a natural mineral although much larger doses are needed when using as a medicine.

It is a mood stabiliser and is usually used for the following:

- Prevent mood swings caused by bipolar affective disorder/manic depression
- Balance out mania and hypomania – extreme highs and lows
- Treat recurrent or severe depression where other medicines have not been effective

Patients may need to take other drugs in combination with mood stabilisers such as antipsychotics or antidepressants.

Lithium patients will be registered with the **Norfolk & Suffolk NHS Foundation Trust Therapeutic Drug Monitoring Lithium Database** <https://tdmsupport.co.uk/login.aspx>: Ensure the residents contact details are up to date with this service. Will need updating at the time the resident moves into the home. Telephone: 01603 421480 ext. 6480, email: [tdm.support@nhs.net](mailto:tdm.support@nhs.net). The resident would have been sent a pack containing lots of useful information, a helpline number, and a Lithium Alert Card, when first registered.

Lithium will be initiated by a Mental Health Specialist or a Psychiatrist. The patient will be counselled and given a purple book/folder containing useful information about lithium and space to make their own notes following appointments. They will be examined before starting treatment and the following will be checked:

- Weight, height, and BMI
- Kidney function – lithium is excreted by the kidneys, so they need to be in good working order otherwise the dose may need to be adjusted.
- Thyroid function – sometimes symptoms of an underactive thyroid can be mistaken for depression. If taking lithium long-term, it can affect the function of the thyroid.
- Heart – lithium may not be suitable in patients with certain heart problems.

A patient will be started on a low dose of lithium and then it will gradually be titrated up as appropriate. Lithium is usually a long-term treatment and **patients should not alter doses or stop taking without consulting a GP first**. If a resident is refusing medication, including Lithium the GP should be made aware without delay.

**It is very important that a patient remains on the same brand of lithium. Patients / Homes should make a note of the brand they are using in the front of their purple record book and care plan to ensure they receive the same one each time.**

### **Side Effects, Toxicity and Interactions**

Lithium can cause several side effects and adverse reactions. More common ones are upset stomach, hand tremor, metallic taste, weight gain, ankle swelling and feeling thirsty. If lithium levels in the bloods are too high, this is known as '**lithium toxicity**' or '**lithium poisoning**'. If a patient suffers this, a Clinician **MUST** be contacted as soon as possible. Symptoms include:

- Severe handshake (tremor)
- Muscle weakness
- Unsteady on feet.
- Muscle twitches
- Slurring of words
- Blurred vision
- Stomach upset with sickness and diarrhoea.
- Confusion
- Drowsiness

Toxicity can occur for a number of reasons. The main ones are:

- Dehydration – patient should drink plenty of water, try to avoid alcohol and speak to Clinician if they have a bout of sickness or diarrhoea.
- Changes in the levels of salt in the diet – don't make any sudden changes without speaking to Clinician (caution if using soluble analgesics, due to Sodium content).
- Medication interactions – other medication can affect the way the kidneys deal with lithium. If patients are being treated with steroids, antibiotics or medication for high blood pressure, heart problems or some types of pain relief they must tell their GP as they may need more frequent monitoring.

### **Monitoring is important.**

A patient will have a blood test within a week of starting lithium to check the levels in the body. The daily dose taken may change, depending on the result. This blood test will be repeated every week until lithium levels in the body are stable. **Bloods will then be repeated every three months** to make sure levels remain steady. The monitoring service SystemTDM will send letters and blood test forms to the patient when due, please ensure your residents share this information with you to ensure you can arrange the blood tests. If blood tests are missed a reminder letter will be issued, following this the patient's GP will be informed

Because of the way lithium works in the body, patients will also need regular checks to make sure that the thyroid and kidneys are working as they should be. These will be checked before starting lithium and then every six months while patient continues to take it (more frequently if there are signs of impairment).

If the patient is at risk of cardiovascular disease and is being treated for depression, they may also have regular electrocardiograms (ECGs) to ensure the heart is working as it should be.

**Ensure monitoring is conducted promptly as requested.**

#### References

<https://tdmsupport.co.uk/login.aspx> accessed October 2023

Title		Best Practice Guidance –
<b>Title</b>	Best Practice Guidance –	
<b>Description of policy</b>	To inform healthcare professionals	
<b>Scope</b>		
<b>Prepared by</b>	Medicines Optimisation Team	
<b>Evidence base / Legislation</b>	Level of Evidence: <i>A. based on national research-based evidence and is considered best evidence</i> <b>B. mix of national and local consensus</b> <i>C. based on local good practice and consensus in the absence of national research based information.</i>	
<b>Dissemination</b>	Is there any reason why any part of this document should not be available on the public website? <input type="checkbox"/> Yes / No <input checked="" type="checkbox"/>	
<b>Approved by</b>	Medicines Optimisation Team	
<b>Authorised by</b>	Medicines Optimisation Team	
<b>Review date and by whom</b>	Medicines Optimisation Team February 2021 or following any change in legislation	
<b>Date of issue</b>	February 2019	

#### Version Control (To be completed by policy owner)

Version	Date	Author	Status	Comment
0.1	February 2019	Emma Kirkham	Draft	
1.0	February 2019	Medicine Optimisation Team	Final	Approved by Senior Team
1.1	October 2023	Medicine Optimisation Team LE	Final	Uploaded to new template only

