

## Psychotropic medication and COVID-19 in Primary Care

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### General Advice

Patients should be reassured to continue to take their prescribed medication if stable and well as with the exception of clozapine they are not known to significantly affect the immune function. A relapse in mental illness could indirectly increase risk by affecting normal behaviours and lead to inpatient admission during a period of time when NHS capacity is significantly reduced.

Prescribers in all settings should not write prescriptions to cover longer periods than normal. Sudden surges in demand for medication will disrupt the medicines supply chain to the detriment of patients. Currently there are sufficient stocks of medicines, the supply chain is working normally and is routinely monitored.

### Lithium

Lithium is a commonly used mood stabiliser indicated primarily for the management of bipolar affective disorder and unipolar depression and is often prescribed in primary care under a [Shared Care Agreement](#). **There is a significant risk of rapid relapse of the underlying mental health condition if lithium treatment is abruptly stopped.**

Lithium has a narrow therapeutic window; therefore the dose required for treatment must be titrated and adjusted on the basis of regular monitoring of the serum concentration of lithium. The requirements for routine blood monitoring are set out in the Shared Care Agreement which reflects NICE guidance. The majority of patients require 3-monthly plasma lithium levels; however those with a stable level and not specified in the ongoing 3-monthly category may have them done at 6-monthly intervals instead.

In addition to lithium plasma monitoring renal function, thyroid function and weight should also be measured at regular intervals (usually 6-monthly) as per the Shared Care Agreement.

Unlike some antipsychotics such as clozapine there is no evidence that lithium increases the risk of developing infections such as respiratory tract infections or complications such as pneumonia. However where patients have developed an infection they may be at an increased risk of developing lithium toxicity. The manufacturer advises that additional measurements should be made if signs of lithium toxicity occur, on dosage alteration, development of significant intercurrent disease, signs of manic or depressive relapse and if significant change in sodium or fluid intake occurs.

### Lithium blood testing during COVID-19 pandemic:

### Management of routine monitoring

The current pandemic is putting a huge strain on the NHS as a whole including primary care and it is expected that access to blood monitoring will be significantly affected.

It may be possible to extend the interval between lithium plasma level monitoring and routine renal and thyroid function monitoring considering:

- Previous plasma levels
- Age
- Renal function
- Thyroid function
- Stability of dose
- Presence or absence of interacting medication
- Patient knowledge of signs of toxicity

This would need considered on a case by case basis and could only be safely managed as a short-term measure as some studies have shown that even one “high” plasma level can impact renal function up to a year afterwards and naturally declining renal function can raise lithium levels.

At risk patients who are unlikely to be appropriate for postponed monitoring include:

- Elderly
- Initiating or stopping drugs that interact with lithium\*
- Established chronic kidney disease
- Evidence of impaired thyroid function
- Raised calcium level
- Poor symptom control
- Poor adherence
- Has a previous lithium serum level > 0.8mmol/L

\* NSAIDS, ACE inhibitors, ARBs, diuretics

**If postponing routine monitoring patients should be directly asked about side-effects, signs of toxicity and signs of hypothyroidism, hypercalcaemia & hyperparathyroidism.**

### Management of lithium patients with suspected or confirmed COVID-19:

The steps described above are likely to help reduce the overall burden on healthcare providers but unlikely to help with patients in self-isolation due to high-risk of COVID-19 or suspected or confirmed cases of COVID-19 as these patients are likely to be at higher risk of lithium toxicity. It would be inappropriate to delay routine monitoring for

these people as it may cause more pressure on the healthcare system overall rather than relieving it.

Recent reports from Wuhan, China suggested that “kidney disease on admission and acute kidney injury (AKI) during hospitalization were associated with an increased risk of in-hospital death” in patients with COVID-19 disease. Therefore, adding weight to the need to continue routine monitoring in these patients wherever possible.

**Where routine monitoring is required to continue provisions should be put in place proactively to manage this. In addition:**

- Patients should be advised to maintain adequate sodium and fluid intake during any acute illness; including COVID-19
- Patients should be asked about any signs of toxicity and reminded of these signs (coarse tremor, nausea & vomiting, dysarthria, drowsiness, ataxia, blurred vision, muscle weakness, tinnitus, confusion and convulsions)
- Patients should be advised to inform their care team of any changes to their drug treatment and to not to take over-the-counter non-steroidal anti-inflammatory drugs (e.g. ibuprofen), but to take paracetamol instead
- Patients should be advised not to stop lithium abruptly unless directed to do so

**Patients who develop a fever, moderate or severe symptoms of COVID-19 and patients who are unable to maintain adequate fluid intake during the course of the illness; particularly those who are elderly or more likely to be at risk of lithium toxicity (as above) should have their lithium levels and renal function monitored as soon as possible** using local PPE equipment and consideration given to a proactive dose reduction or temporary omission. The patient’s mental health team would need consulted in these circumstances as alteration of the lithium would depend on their history and risk of toxicity balanced against relapse risk.

**If any signs of toxicity are present lithium should be immediately discontinued and plasma level and renal function monitoring arranged using local PPE equipment and procedures.** The patients mental health team should be contacted to advise of the actions taken.

## References

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