

## Lithium therapy

Lithium is used as a mood stabilizer to prevent relapses in bipolar affective disorder, an illness in which episodes of depression can alternate with periods of high mood. It is also used to augment treatment of depression and in people who suffer from recurrent depression.

### Types

It occurs naturally and is dispensed in two forms Lithium citrate and Lithium carbonate. It is best to stick to the form that you have been started on. Lithium citrate also comes in liquid preparation.

### Only if asked

It is more effective in people who have a family history of mood disorder. It is not thought to be helpful in rapid cycling illness.

### Lithium work up

Prior to commencing Lithium therapy you will need to undergo some routine blood tests which include kidney function tests as Lithium is excreted through the kidney and can interfere with it's function. Also it can cause the thyroid gland, a gland present at the front of the neck to become over or under active. This problem, if it occurs, can be easily corrected by giving thyroid supplements. A tracing of your heart will also be taken to rule out any heart problems.

### Dosing, levels and follow up

There is no standard dose. People are started on 200-400 mg/day dose and then lithium levels are checked in the blood after 5-7 days. This is done because a certain range (between 0.6-1.0) has been found to be beneficial. Lithium level in the body depends on kidney functions and varies from person to person. In the early part of the treatment blood tests are done on a weekly basis and dose will be adjusted accordingly. Once level is steady, three monthly blood tests are required. To ensure that regular blood tests are carried out, people on Lithium are registered with a body called the Lithium register, which monitors the lithium level and maintains a record. The idea is to maximise benefits and ensure that people do not experience side effects by being on a higher than necessary dose. Thyroid gland functions are also checked on a six monthly basis. It is advisable to continue with Lithium for at least 3 years.

The body finds it hard to differentiate between common salt and lithium. So states in which you lose salt and water (diarrhoea and dehydration) body tries to conserve salt and therefore less sodium and Lithium are excreted leading to increase lithium levels. It is best to consult your doctor and ask for advice if faced with such problems.

### Side effects

Like all medications lithium also has side effects. Some of them occur in the early part of the treatment but improve with time and it is important to remember that these are the possible side effects and you might not experience any of them. They include excessive thirst, passing more water, mild stomach cramps, dry mouth, metallic taste, weight gain, fine tremor in hands and worsening of acne.

### Lithium toxicity

If lithium level in the body goes over the therapeutic range one can develop some serious side effects. It is important to be aware of these so that you can recognize them and get in touch with your doctor should you experience them. They include gross or severe tremor in the hands, vomiting and diarrhoea, muscle twitching, confusion, blurred vision, slurring of speech and gait imbalance.

### Interactions

Some medication like blood pressure tablets and water tablets can interact with Lithium. Over the counter drugs like pain killers and herbal medication can also increase its levels in the body so consult the pharmacist or your doctor.

### Pregnancy:

The first three months of pregnancy are vital because it is during this time that most of the baby's development takes place and different body parts are formed. As a general rule all drugs are best avoided during pregnancy but one has to weigh the risks and benefits. It is a difficult decision to make but a doctor's role is to provide information about the pros and cons and to help and support you.

Benefits: Staying on lithium will make relapse less likely during this stressful period for the mother and thereby help in establishing a strong bond between mother and child. In case of a relapse self-neglect, impulsive and risk taking behaviour can have serious consequences.

Risks: Lithium can cause heart malformations in the developing baby (Ebstein's anomaly). The risk is 1:1000. Lithium can also affect baby's thyroid gland (neonatal goitre) though now it is believed that the risk is not as great as it was once believed to be.

### Follow up in pregnancy

If a pregnant lady decides to stay on Lithium then high resolution scans can be arranged between 6 and 18 weeks of pregnancy by liaising with her obstetric team. Due to change in pharmacodynamics (because of changes in mother's body the concentration of drug will change), dose of lithium may need to be adjusted along with monthly monitoring of levels. Lithium is excreted in milk so baby should not be breastfed.

If the decision is to come off Lithium then it should ideally be done prior to conception. Patient is gradually weaned off Lithium over 4-6 weeks, as abrupt discontinuation is associated with increased risk of relapse.

If the patient is already pregnant and wants to come off Lithium, then it should be stopped at once to minimise the damage. Patient can then be supported by a CPN in the community with regular mental state reviews and monthly follow-ups by the medical team so that any signs of relapse can be picked up early. In case of a relapse treatment with antipsychotics like Haloperidol and Chlorpromazine can be considered.