

### **Contact Details**

Include your midwife, mental health midwife, PHN or other clinician details here:





## Lithium in Pregnancy and Breastfeeding

IN CONJUNCTION WITH



### Lithium in Pregnancy and Breastfeeding

**Disclaimer:** This webpage provides information, not advice. You should read our full disclaimer before reading further.

© October 2019 Health Service Executive (Ireland) & November 2018 Royal College of Psychiatrists.

### This is leaflet is for any woman who is:

- Taking Lithium and wants to get pregnant.
- Taking Lithium and is pregnant.
- Pregnant and may need to start Lithium in pregnancy.
- Taking Lithium and wants to breastfeed
- Breastfeeding and may need to start Lithium and for their partner, family and friends.

### This leaflet will help you to understand:

- How to make a decision about using Lithium in pregnancy and breastfeeding.
- What to do if you are taking Lithium and want to get pregnant.
- What to do if you are taking Lithium and find out you are pregnant.
- How Lithium might affect your pregnancy and your baby.
- The care you need whilst you are taking Lithium in pregnancy.

### What is Lithium?

Lithium is a medication used to treat Bipolar Disorder. This can be used if a person is manic or very depressed, but mainly to prevent major mood swings. Lithium can also be used to boost the effect of antidepressants when depression does not respond to treatment with an antidepressant alone.

The medication can be prescribed as Lithium Carbonate (Priadel®, Camcolit®, Liskonum®) or Lithium Citrate (Liliquid® or Priadel® Liquid).

### Making a decision about taking Lithium in pregnancy:

Pregnancy will mean that you will have to think about whether to continue, stop or change any medication you are taking – including Lithium. Unplanned pregnancies are common, so you may well find yourself having to make decisions about your medication after you realise that you are pregnant.

Decisions about medications in pregnancy are not straightforward or easy. This is because there is often not enough information to say that a medication is 100% safe for use in pregnancy. It is important to weigh up the risks and benefits of taking medication in your individual case, including:

- How often and how severe your episodes of illness have been.
- Medications which have helped, made no difference or caused side effects.
- How you and your baby might be affected if you become unwell in pregnancy, or after the birth.
- How Lithium and other medications might affect your baby.

2

See our leaflets on Planning a Pregnancy and Mental Health in Pregnancy for more information about decision making.

If you are taking Lithium, you will usually have had a serious mental illness. The risks of relapse in pregnancy and after birth are high, particularly if you have ever had a diagnosis of Bipolar Disorder, Schizoaffective Disorder or severe Depression. You need to be able to discuss the risks and benefits, for you and your baby, of continuing Lithium in pregnancy with a psychiatrist. If possible, this should be a perinatal psychiatrist. This is a doctor who specialises in caring for women with mental health problems in pregnancy and after birth. He or she can also explain how likely you are to become unwell during this time.

In Ireland all maternity units/hospitals have access to perinatal mental health services through mental health midwives. Specific perinatal psychiatrists work from the six larger hub sites: three in the Dublin maternity hospitals and also in the maternity units/hospitals in Limerick, Cork and Galway. These services can be accessed through your GP or midwife at the booking clinic. Mental health midwives in the other spoke maternity unit/hospital sites are a point of contact for additional mental health support, including access to liaison psychiatric services who have links to the perenial psychiatrists in specialist hub sites.

### What should I do if I want to get pregnant and I'm taking Lithium?

Talk to your psychiatrist or, if you are not currently under mental health care, ask your GP to refer you. If there is a perinatal psychiatrist in your area, your GP or psychiatrist should refer you to them. A psychiatrist can help you decide whether it is best for you to continue Lithium, or to think about changing to another medication whilst you are trying to get pregnant. The other options are antipsychotic medications, such as Olanzapine or Quetiapine or Aripiprazole<sup>(1-2)</sup>.

If you have had episodes of bipolar disorder, schizoaffective disorder or severe depression the risk of becoming unwell in pregnancy and after birth is high if you stop medication altogether <sup>(1-2)</sup>.

However, if you do decide to stop medication, it is important that:

- You regularly see someone from the mental health team, so that they can keep an eye on your mental health.
- You and your family know how to get help if you become unwell.

Don't stop your medication without getting advice. Stopping Lithium suddenly increases the chance of relapse even more <sup>(3)</sup>.

4

### What should I do if I find out I'm pregnant and I'm taking Lithium?

Talk to your psychiatrist or GP as soon as possible. If there is a perinatal mental health service in your area, you should be able to see them. The psychiatrist can help you make the decision about medication that is best for both you and your baby. They can also give you information about the risks of becoming unwell in pregnancy and after birth. If you have a diagnosis of Bipolar Disorder or Schizoaffective Disorder you have a high risk of a serious illness called Postpartum Psychosis (see our leaflet on Postpartum Psychosis for more information). Your psychiatrist can make sure you have a plan for your care during pregnancy, when you come into hospital to have your baby, and after birth. This will help you stay as well as possible and make sure that you and your family has all the help and support you need.

Your psychiatrist should talk to your obstetrician, midwife and mental health midwife. It is important that they know you are taking Lithium. They also need to know what else they can do to help you stay as well as possible.

Again, do not stop Lithium without getting advice. Women who stop Lithium in pregnancy have high rates of relapse. Stopping suddenly makes the risk of becoming unwell even higher. If you are going to stop it, this is best done gradually over at least 4 weeks. You can talk to your psychiatrist about whether to continue Lithium or change to another medication. The other options are antipsychotics, such as Olanzapine or Quetiapine.

You may well benefit from lifestyle changes (healthy eating, exercise etc.) and talking therapies. However, for many people, medication is a vital part of staying well.

Some women do choose to stop all medication during pregnancy. If you do, do think about restarting Lithium or an antipsychotic within 24 hours of birth. This is because you are at greatest risk of Postpartum Psychosis immediately after birth. Starting these medications at this time may reduce this high risk <sup>(4)</sup>.

Whatever decision you make about your medication, make sure that your mental health is closely monitored in pregnancy and after birth, and that you and your family know how to get help and support quickly, if you start to become unwell.

### Will Lithium make it harder for me to get pregnant?

No. Lithium does not affect fertility in women <sup>(1)</sup> and so taking Lithium should not make it more difficult to get pregnant.

### Does Lithium increase the risk of miscarriage?

As many as 1 in 5 pregnancies end in miscarriage even when a woman has not taken any medication. There is not enough research evidence for us to know whether Lithium increases the risk of miscarriage.

### Does Lithium cause any birth defects?

About 3 in every 100 babies are born with a birth defect even when their mother has not taken any medication in pregnancy. Birth defects usually occur in the beginning of pregnancy (usually in the first trimester) when the baby's organs are developing. Some studies have found a small increase in the overall risk of birth defects <sup>(5)</sup> but other large studies have not found this <sup>(1,6,7,8)</sup>. We need more research on this to be absolutely sure of the risk.

There has been specific concern about whether using Lithium in pregnancy increases the risk of heart defects in babies. About 1 in every 100 babies is born with a heart defect, even if the mother has not taken medication. Heart defects happen during the first 8 weeks of pregnancy. A small increased risk of heart defects has been found in some studies <sup>(6,8)</sup> but other studies have found no increased risk <sup>(1)</sup>.

There was a particular worry about a small increase in babies born with a rare heart problem, known as Ebstein's anomaly. It can be mild but can also be severe. This occurs in 1 in 20,000 babies, even when the mother has taken no medication in pregnancy. The studies suggested that, if Lithium was taken during pregnancy, the risk increased to 1 in 1000 babies. However, more recent studies have not shown an increased risk (1). They have also suggested that it may be the mother's mental health problems that are associated with an increased risk of heart defects, rather than Lithium or other medication <sup>(9)</sup>.

More research is needed to be sure about whether Lithium increases the chance of birth defects. If there is an increased risk, it is likely to be very small.

### Does Lithium cause any other problems in pregnancy?

There is not enough information to be sure about whether Lithium increases the risk of low or high birthweight, or premature birth  $^{\rm (1)}$ 

Lithium can cause the thyroid gland to be underactive (hypothyroidism). There have been cases reported of babies developing a goitre (enlarged thyroid gland) if the mother's hypothyroidism is not treated. You will have blood tests in pregnancy to check your thyroid function. This means you can have treatment if needed before you or your baby develop any problems.

There have been cases reported of babies being sedated or having reduced muscle tone (hypotonia). There have also been reports of babies having difficulty feeding or breathing if Lithium is used at the end of pregnancy, especially in high doses. Your baby will be checked after birth by the neonatologist (a doctor who looks after babies). If your baby has any of these problems, they will have any extra care they need and usually recover within a few days.

Small studies have followed up children exposed to Lithium in pregnancy until the age of six. These have not found any increase in physical health, learning or developmental problems<sup>(10)</sup>.

Lithium can interact with other medications, including some painkillers. Make sure that your obstetrician knows you are taking Lithium, so they prescribe safe pain relief during labour and after birth. They can also check whether it's safe for you to take other medications in pregnancy if you need them.

### Do I need any extra tests in pregnancy?

All women have ultrasound scans in pregnancy at around 12 weeks and 20 weeks. It is normal to check for heart and other birth defects at these scans. You should let your obstetrician or midwife know that you are taking Lithium to make sure that you have screening for heart defects. You should not need any additional scans during pregnancy just because you are taking Lithium.

### How often does my Lithium Level need to be checked in pregnancy?

During pregnancy there are changes in the amount of fluid in your body and the rate at which your kidneys get rid of Lithium in your urine. This means that your Lithium level will change at different stages of pregnancy. So, your Lithium level will need to be measured more often than usual. You should have blood tests for Lithium at least monthly during pregnancy, and then weekly from 36 weeks <sup>(1,2)</sup>. Usually your Lithium dose will need to be increased to keep your Lithium level in the therapeutic range during pregnancy. This can vary. Your Lithium level will be used to decide whether the dose you are taking needs to change.

In many women the Lithium level increases again towards the end of pregnancy or after birth. This means the dose needs to be carefully adjusted <sup>(1,2,11)</sup>. It is important that your mental health team is involved in managing your lithium levels throughout pregnancy and after childbirth so that your Lithium dose and level is in the optimal range. You should give birth in hospital if you are taking Lithium.

If you get an infection, or have severe vomiting (hyperemesis), this can affect your Lithium level. If this happens to you, make sure your obstetrician or GP checks your Lithium level as soon as possible. If you have any kidney disease or preeclampsia your lithium levels need to be closely monitored jointly by your psychiatrist and obstetrician. If you need to take any new medication it is always important to check whether it interacts with Lithium.

Your psychiatrist, obstetrician or midwife should tell the neonatologist (a doctor who looks after newborn babies) that you have taken Lithium in pregnancy. This doctor will check your baby's health and his/her Lithium level. If your lithium level is well controlled with good monitoring it is unlikely that the baby's Lithium levels will be high.

#### Can I breastfeed if I'm taking Lithium?

Lithium passes easily into babies' circulation through breastmilk, giving the baby a high level of Lithium in their blood. The National Institute for Health and Care Excellence <sup>(2)</sup> and the British Association of Psychopharmacology <sup>(1)</sup> recommend **not** to breastfeed whilst taking Lithium unless under advice from a perinatal psychiatrist.

However, there have been some cases reported of women successfully breastfeeding when taking Lithium <sup>(12)</sup>. If you do want to breastfeed when taking Lithium talk to your psychiatrist and obstetrician. Your baby will have to have regular blood tests to monitor his or her Lithium level, thyroid and kidney function. Babies can easily get dehydrated and this can increase the risk of harm from Lithium. If you do want to breastfeed while taking Lithium, you will need to check whether your local services can provide the monitoring your baby will need.

Although breastmilk is good for babies, the most important thing for your baby is that you are as well as possible. Not all women manage to breastfeed even if they want to. There are many different reasons for this. If you can't breastfeed because you need to take Lithium don't worry. Bottle feeding can have some advantages – and you can still have the skin to skin contact which is an important part of bonding with your baby. If you have a partner or family member staying with you, they can do some (or all) of the night feeds so that you can make sure you have enough sleep. This is an important part of helping you to stay well.

10

# Further information/ online resources



### **References:**

- McAllister-Williams RH, Baldwin DS, Cantwell R, Easter A, Gilvarry E, Glover V et al. British Association for Psychopharmacology consensus guidance on the use of psychotropic medication preconception, in pregnancy and postpartum. J Psychopharmacol. 2017; **31**: 519-552.
- 2. National Institute for Health and Care Excellence. CG192. Antenatal and postnatal mental health: Clinical management and service guidance. NICE 2014. www.nice.org.uk/ guidance/CG192
- Faedda GL, Tondo L & Baldessarini RJ. Outcome after rapid vs gradual discontinuation of Lithium Treatment in Bipolar Disorders. Arch Gen Psychiatry. 1993;50:448-455.
- Wesseloo R, Kamperman AM, Munk-Olsen T, Pop VJ, Kushner SA, Bergink V. Risk of Postpartum Relapse in Bipolar Disorder and Postpartum Psychosis: A Systematic Review and Meta-Analysis. Am J Psychiatry. 2016;**173**:117-27.
- Munk-Olsen T, Liu X, Viktorin A, Brown HK, Di Florio A, D'Onofrio BM, Gomes T et al. Maternal and infant outcomes associated with lithium use in pregnancy: an international collaborative meta-analysis of six cohort studies. Lancet Psychiatry. 2018; 5:644-652
- Diav-Citrin O, Shechtman S, Tahover E, Finkel-Pekarsky V, Arnon J, Kennedy D, et al. Pregnancy outcome following in utero exposure to lithium: A prospective, comparative observational study. Am J Psychiatry. 2014; **171**: 785–794.
- McKnight RF, Adida M, Budge K, Stockton S, Goodwin GM, Geddes JR.Lithium toxicity profile: A systematic review and meta-analysis. Lancet 2012; 379: 721–728.

- Patorno E, Huybrechts KF, Bateman BT, Cohen JM, Desai RJ, Mogun H e al. Lithium use in pregnancy and the risk of cardiac malformations. N Engl J Med. 2017; **376**: 2245-2254.
- Boyle B, Garne E, Loane M, Addor MC, Arriola L, Cavero-Carbonell C et al. The changing epidemiology of Ebstein's anomaly and its relationship with maternal mental health conditions: A European registry-based study. Cardiol Young. 2016; 27:677-685.
- Haskey C, Galbally M. Mood stabilizers in pregnancy and child developmental outcomes: A systematic review. Aust N Z J Psychiatry. 2017;51:1087-1097.
- Wesseloo R, Wierdsma AI, van Kamp IL, Munk-Olsen T, Hoogendijk WJG, Kushner SA & Bergink
  Lithium dosing strategies during pregnancy and the postpartum period. Br J Psychiatry. 2017; 211: 31-36.
- Bogen DL, Sit D, Genovese A, Wisner KL. Three cases of lithium exposure and exclusive breastfeeding. Arch Women's Mental Health. 2012;15:69-72.

### Websites:

Best use of Medicines in Pregnancy - www. medicinesinpregnancy.org/Medicine--pregnancy/Lithium/

Action on Postpartum Psychosis Network - www. app-network.org

**Mother to Baby,** Medications and more during Pregnancy and Breastfeeding. (OTIS - 2017). https:// mothertobaby.org/fact-sheets/lithium-pregnancy/

**Choice and Medication,** information for people who use services, carers and professionals. (Mistura/Stephen Bazire 2019). www.choiceandmedication.org

**MyChild** (https://www2.hse.ie/my-child/). Your guide to pregnancy, baby and toddler health. Trusted information from experts and Health services and support.

**Cuidiú** (https://www.cuidiu.ie/). Caring Support for Parenthood. A parent to parent voluntary support charity.

**Tusla** community based supports – family resource centres. (www.tusla.ie/services/family-community-support/family-resource-centres/).

**HSE'S Your Mental Health** (https://www2.hse.ie/ mental-health/). Find advice, information and support services for mental health and well-being.

#### **Psychological Society of Ireland** (https://www. psychologicalsociety.ie/) This online voluntary directory is to help you find a psychologist who is recognised by

the Psychological Society of Ireland (PSI) as being a Chartered Member of Society.

**Citizen's Information:** https://www.citizensinformation. ie/en/search/?q=pregnancy Your rights and entitlements from the citizen's information board.

14

### Credits

Produced by the RCPsych Public Engagement Editorial Board

The 'Building Capacity, Psychiatry Leadership in Perinatal Mental Health Services' project: commissioned by NHS England in partnership with Health Education England and delivered by the Royal College of Psychiatrists.

#### Ireland

**Further Edited for use by HSE:** The Specialist Perinatal Editorial Group a subset of the National Oversight Implementation Group, Specialist Perinatal Mental Health Programme, Clinical Design and Innovation, HSE.

#### **Co-ordinator:**

Fiona O'Riordan, Programme Manager, Specialist Perinatal Mental Health Services (SPMHS), HSE.

#### **Expert Reviewers:**

**Dr. Mas Mahady Mohamad**, Perinatal Psychiatrist, SPMHS, HSE, University Maternity Hospital Limerick.

**Dr. Richard Duffy**, Perinatal Psychiatrist, SPMHS, Rotunda Hospital, Parnell Square, Dublin 1.

**Maria Gibbons**, Mental Health Midwife, SPMHS, HSE, University Maternity Hospital Limerick.

**Ursula Nagle**, Clinical Midwife Specialist, SPMHS, Rotunda Hospital, Parnell Square, Dublin 1.

**Dr. Niamh O'Dwyer**, Senior Psychologist, SPMHS, HSE, University Maternity Hospital Limerick.



© October 2018 Royal College of Psychiatrists, all rights reserved. This leaflet may not be reproduced in whole or in part, without the permission of the Royal College of Psychiatrists and Clinical Design & Innovation, Health Service Executive (HSE).

16

#### Disclaimer

#### This leaflet provides information, not advice

The content in this leaflet is provided for general information only. It is not intended to, and does not, amount to advice which you should rely on. It is not in any way an alternative to specific advice.

You must therefore obtain the relevant professional or specialist advice before taking, or refraining from, any action based on the information in this leaflet.

If you have questions about any medical matter, you should consult your doctor or other professional healthcare provider without delay.

If you think you are experiencing any medical condition you should seek immediate medical attention from a doctor or other professional healthcare provider.

#### No representation, warranties or guarantees

Although we make reasonable efforts to compile accurate information in our leaflets and to update the information in our leaflets, we make no representations, warranties or guarantees, whether express or implied, that the content in this leaflet is accurate, complete or up to date.

The Royal College of Psychiatrists is a charity registered in England and Wales (228636) and in Scotland (SCO38369).

18