MATERNAL USE OF SSRIs – NEONATAL CLINICAL GUIDELINE

1. **Aim/Purpose of this Guideline**
   1.1. To provide guidance on management of neonates exposed antenatally to maternal selective serotonin reuptake inhibitors (SSRIs) eg. Fluoxetine, and related drugs - selective noradrenaline reuptake inhibitors (SNRIs), eg Venlafaxine and specific serotonergic antidepressants (NaSSAs) eg. Mirtazapine. All drugs will now be described under SSRIs. Aimed at midwifery and neonatal staff.

2. **The Guidance**

   **2.1. Background**
   Depression occurs in 7-15% of all pregnancies and is an important perinatal factor affecting neonatal outcome\(^1\). SSRIs are the commonest prescribed pharmacological treatment for depression and anxiety in pregnancy\(^1\). Neonatal abstinence syndrome has been shown to occur in up to 30% of infants exposed to SSRIs in the third trimester of pregnancy\(^2\).

   **2.2.** Adequate treatment of perinatal depression has important consequences for both mother and infant. Undertreated maternal depression is associated with perinatal complications including prematurity and low birth weight. It is therefore vital that the mother has appropriate support and treatment.

   **2.3.** SSRIs and related drugs in pregnancy show no clear association with congenital abnormalities with a debatable small increased risk of congenital heart defects\(^1\).

   **2.4.** Neonatal withdrawal commonly includes tremors, jitteriness, irritability, muscle tone abnormalities, excess crying, sleep disturbance, tachypnoea and feeding problems\(^1\). Less commonly lethargy, weak cry, hypoglycaemia and convulsions\(^1\).

   **2.5.** Symptoms generally occur within 2 days after birth (occasionally not until days 5-7) and may persist for 2-4 weeks\(^1\).

   **2.6.** There is an association of late perinatal exposure to SSRIs and persistent pulmonary hypertension of the newborn (PPHN)\(^1;3\). A recent large study suggests that there is an increased risk, but that the absolute risk is small\(^6\). This is a serious condition but if recognized and treated early can have a good outcome.

   **2.7.** Effects during lactation
   SSRIs are excreted into breast milk, with great variability depending upon individual drugs, maternal dose and the infants metabolism. Breast feeding is not discouraged, but fluoxetine with its long elimination half life can accumulate in the newborn. Its use in breast feeding should be discouraged. Low doses of 20mg a day maybe considered safe for breastfeeding\(^4\). Citalopram also has a long half life but not to the extent of fluoxetine and therefore 20mg/day or less is probably safe for breastfeeding. Pumping and discarding of milk during estimated peak concentration is of little value\(^5\).
2.8. Practical guidance – Antenatal
Management of maternal depression or anxiety disorder is best evaluated and adjusted before conception to ensure proper treatment during pregnancy. If possible, non-pharmacological treatment is preferred. If pharmacological treatment is indicated, several factors are of influence in the choice of antidepressants: prior response to pharmacological treatment, gestation, intention to breast feed and the safety profile based on the available experience. In general, treatment should be unchanged in patients whose symptoms are well controlled. Place of delivery and duration of inpatient observations should, whenever possible, be agreed before delivery. Infant feeding method and information concerning SSRIs and lactation should be provided, and whenever possible the intended feeding method (breast or formula) should be agreed and documented antenatally. There should be very few situations in which the decision on whether or not to initiate and continue breast feeding cannot be made before the baby’s birth. See figure.

Published\(^1\) (Archives of Diseases of Childhood ) guidance recommends an observation period of at least 48 hours in hospital. We consider this a sensible and safe recommendation, but we can be flexible about earlier discharge depending upon individual family circumstances and individual babies. We would recommend: A hospital delivery to allow early assessment of the baby Before discharge:
1. Oxygen saturation screening to detect early pulmonary hypertension
2. No additional concerns about the baby
3. Feeding is going well
4. Information leaflet is given to parents – see appendix
5. Parents know who and how to call for help
6. There is adequate support/telephone/transport at home

As an inpatient scoring systems for withdrawal are also recommended- refer to RCHT Neonatal Abstinence syndrome guideline.

2.10. Practical Guidance – Breast Feeding
Breast feeding should not be discouraged, with one exception – fluoxetine because of its long half life and risk of accumulation. Risks of maternal depression and the benefits of breast feeding have to be considered. See figure.
Figure reproduced from reference 1.
Use of SSRIs/SNRIs/NaSSAs during pregnancy and lactation

Preconception

Drug treatment (still) indicated?

no

yes

Taper medication
Monitor relapse

Pregnancy

Is medication compatible during pregnancy and lactation?

Pregnancy

Preference
sertraline
paroxetine
fluoxetine (not during lactation)

Limited data
venlafaxine
fluvoxamine
mirtazapine
escitalopram

Lactation

Preference
sertraline
paroxetine

Consider
fluvoxamine
citalopram
venlafaxine

Discourage
fluoxetine

SSRI/SNRI/NaSSA exposure in third trimester of pregnancy

Clinical observation for at least 48 hours
Finnegan score every 8 hours

Finnegan score < 4  no SRI-related symptoms
Finnegan score 4-7  mild SRI-related symptoms
wait and see, supportive care is usually sufficient
Finnegan score ≥ 8  serious SRI-related symptoms
intensification of Finnegan scores every 2 hours
If Finnegan scores remain ≥ 8 in 3 subsequent measurements, treatment is indicated, for example
with phenobarbitone

Follow-up
Consider neuro-developmental follow-up in infants with significant SRI-related symptoms
3. Monitoring compliance and effectiveness

<table>
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<tr>
<th>Element to be monitored</th>
<th>Key changes in practice recommended by guidance</th>
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<tr>
<td>Lead</td>
<td>Dr Paul Munyard. Consultant Paediatrician and Neonatologist.</td>
</tr>
<tr>
<td>Tool</td>
<td>Audit. To be included in the Neonatal Clinical Audit Programme. Findings reported to the Child Health Directorate Audit meeting / Governance Meeting.</td>
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<tr>
<td>Frequency</td>
<td>As dictated by audit findings</td>
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<td>Reporting arrangements</td>
<td>Child Health Directorate Audit and neonatal Clinical Guidelines meetings</td>
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<td>Change in practice and lessons to be shared</td>
<td>Required changes to practice will be identified and actioned within 3 months of audit. A lead member of the team will be identified to take each change forward where appropriate. Lessons will be shared with all the relevant stakeholders.</td>
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4. Equality and Diversity

4.1. This document complies with the Royal Cornwall Hospitals NHS Trust service Equality and Diversity statement which can be found in the ‘Equality, Diversity & Human Rights Policy’ or the Equality and Diversity website.

4.2. Equality Impact Assessment
The Initial Equality Impact Assessment Screening Form is at Appendix 2.
### Appendix 1. Governance Information

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<th>MATERNAL USE OF SSRIs – NEONATAL CLINICAL GUIDELINE</th>
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<td><strong>Date Valid To:</strong></td>
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</table>
| **Directorate / Department responsible (author/owner):** | Paul Munyard  
Child Health. Neonatal |
| **Contact details:** | 01872 252667 |
| **Brief summary of contents** | This guideline is designed to provide guidance on the management of infants exposed to SSRI and related drugs in pregnancy. |
| **Suggested Keywords:** | Neonatal. Jaundice. Prolonged. Neonate |
| **Target Audience** | RCHT  
PCH  
CFT  
KCCG |
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Child Health Audit and Neonatal Guidelines meeting. |
| **Divisional Manager confirming approval processes** | Jan Walters |
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✓ Intranet Only |
| **Document Library Folder/Sub Folder** | Child Health/ Neonatal |
| **Links to key external standards** |  |
Neonatal abstinence syndrome – a neonatal clinical guideline.

**References**

6. Antidepressant Use Late in Pregnancy and Risk of Persistent Pulmonary Hypertension of the Newborn
Krista F. Huybrechts, MS, PhD1,2; Brian T. Bateman, MD, MSc1,2,3; Kristin Palmsten, ScD4; Rishi J. Desai, PhD1; Elisabetta Patorno, MD, DrPH1,2; Chandrasekar Gopalakrishnan, MD, MPH1; Raisa Levin, MS1; Helen Mogun, MS1; Sonia Hernandez-Diaz, MD, DrPH5

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**Related Documents:**

**Training Need Identified?**

No training needs identified
Version Control Table

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<td>V1.0</td>
<td>Initial Issue and formatting</td>
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This document is only valid on the day of printing.

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APPENDIX

Patient Information for mothers who are taking Antidepressant (SSRI and similar drugs) use in pregnancy and Breast feeding.

Is it important to treat anxiety and depression in pregnancy?
It is important for the health of mothers and babies that depression and anxiety is treated effectively, this improves the outcome for the babies. The treatments should be decided ideally before pregnancy, but certainly before delivery, with your doctors, including advise on breast feeding.

How common is withdrawal from SSRIs?
Babies whose mothers are on commonly prescribed antidepressants- known as SSRIs (and similar medications) have become used to the drug in their system before birth and can show withdrawal symptoms after birth. Withdrawal is quite common, with about 3 babies in every 10 showing withdrawal symptoms. These occur particularly in the first 2 days of life, and occasionally longer. The symptoms of withdrawal include jitteriness, agitation, feeding difficulties and breathing difficulties. Most of these are mild and the babies improve without any treatment. Rarely more severe problems occur including drowsiness, dehydration, convulsions and low blood sugars – when medical help should be sought immediately (about 1 in 300 babies withdrawing).

Are there other serious complications?
There is a small risk of a serious condition affecting blood flow to the lungs, called persistent pulmonary hypertension, this requires urgent medical attention. A new large study has shown that the risk is very small, and having the oxygen saturation test after birth will identify most babies with this condition early.

What is recommended?
Published guidance in the journal of paediatrics in the UK recommends a hospital delivery and 48 hours of hospital observation. We think this is sensible and safe advice, but we can be flexible about earlier discharge depending upon individual family circumstances and individual babies.
We would recommend: A hospital delivery to allow early assessment of the baby
Before discharge check:
  - Oxygen saturation screening to detect early pulmonary hypertension
  - No additional concerns about the baby
  - Feeding is going well
  - Information leaflet is given to parents – see appendix
  - Parents know who and how to call for help
  - There is adequate support/telephone/transport at home

We would encourage breast feeding with the exception of the medicine called fluoxetine, there are other similar drugs which are less likely to have effects on the baby, and this should be discussed in advance between the mother and her doctors.

Clearly the risks and benefits to the mother and her baby need to be balanced in every case, taking the above guidance into account.