

ABSTINENCE SYNDROME • 1/3

RECOGNITION AND ASSESSMENT

Definition

Neonatal withdrawal/abstinence syndrome

- Symptoms evident in babies born to opiate-dependent mothers and mothers on other drugs associated with withdrawal symptoms (generally milder with other drugs)

Timescale of withdrawal

- Signs of withdrawal from opiates (misused drugs, e.g. heroin) can occur <24 hr after birth
- Signs of withdrawal from opioids (prescribed drugs, e.g. methadone) can occur 3–4 days after birth, occasionally up to 2 weeks after birth
- Multiple drug use can delay, confuse and intensify withdrawal signs in the first weeks of life

Minor signs

- Tremors when disturbed
- Tachypnoea (>60/min)
- Pyrexia
- Sweating
- Yawning
- Sneezing
- Nasal stuffiness
- Poor feeding
- Regurgitation
- Loose stools
- Sleeping <3 hr after feed (usual among breastfed babies)

Major signs

- Convulsions
- Profuse vomiting or diarrhoea
- Inability to co-ordinate sucking, necessitating introduction of tube feeding
- Baby inconsolable after 2 consecutive feeds

AIMS

- To identify withdrawal symptoms following birth
- To give effective medical treatment where necessary
- To promote bonding and facilitate good parenting skills
- To support and keep baby comfortable during withdrawal period
- To optimise feeding and growth
- To identify social issues and refer to appropriate agencies

ANTENATAL ISSUES

- Check maternal hepatitis B, hepatitis C and HIV status and decide on management plan for baby

Check maternal healthcare record for case conference recommendations and discuss care plan for discharge with [safeguarding lead midwife](#)/[drug liaison midwife](#)

Management of labour

- Make sure you know:
 - type and amount of drug(s) exposure
 - route of administration
 - when last dose was taken
- **Neonatal team** are not required to be present at delivery unless clinical situation dictates

IMMEDIATE TREATMENT

Delivery

- **Do not give naloxone** (can exacerbate withdrawal symptoms)
- Care of baby is as for any other baby, including encouragement of skin-to-skin contact and initiation of early breastfeeding, if this is mother's choice (see **Breastfeeding** guideline)

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After delivery

- Transfer to **postnatal ward/transitional care** and commence normal care
- Admit to **NNU** only if there are clinical indications
- Keep babies who are not withdrawing, feeding well and have no child protection issues with their mothers in **postnatal ward/transitional care**
- Babies who are symptomatic enough to require pharmacological treatment usually require admission to **NNU**
- Start case notes
- Take a detailed history, including:
 - social history, to facilitate discharge planning
 - maternal hepatitis B, hepatitis C and HIV status
- Ensure postnatal baby check and daily review by paediatrician

As symptoms of withdrawal can be delayed, keep baby in hospital for ≥ 4 days

SUBSEQUENT MANAGEMENT

- Aims of managing a baby at risk of neonatal drug withdrawal are to:
 - maintain normal temperature
 - reduce hyperactivity
 - reduce excessive crying
 - reduce motor instability
 - ensure adequate weight gain and sleep pattern
 - identify significant withdrawal requiring pharmacological treatment
- Ensure baby reviewed daily by **neonatal staff**
- For babies with minor signs, use non-pharmacological management (e.g. swaddling)
- Start pharmacological treatment (after other causes excluded) if there is:
 - recurrent vomiting
 - profuse watery diarrhoea
 - poor feeding requiring tube feeds
 - inconsolability after 2 consecutive feeds
 - seizures
- The assessment chart (see below) aims to reduce subjectivity associated with scoring systems
- When mother has been using an opiate or opioid, a morphine derivative is the most effective way to relieve symptoms
- When there has been multiple drug usage, phenobarbital may be more effective

Opioids

- If authorised by experienced doctor/ANNP start morphine 40 microgram/kg oral 4-hrly. In rare cases, and after discussion with consultant, it may be necessary to increase dose by 10 microgram/kg increments
- If baby feeding well and settling between feeds, consider doubling dose interval and, after 48 hr, reducing dose by 10 microgram/kg every 48 hr. If major signs continue, discuss with experienced doctor/ANNP
- Consider need for other medication (e.g. phenobarbital)

Phenobarbital

- For treatment of seizures and for babies of mothers who are dependent on other drugs in addition to opiates and suffering serious withdrawal symptoms, give phenobarbital 20 mg/kg IV loading dose over 20 min, then maintenance 4 mg/kg oral daily
- Unless ongoing seizures, give a short 4–6 day course
- For treatment of seizures, see **Seizures** guideline

Chlorpromazine

- For babies of mothers who use benzodiazepines, give chlorpromazine 1 mg/kg oral 8-hrly if showing signs of withdrawal
- remember chlorpromazine can reduce seizure threshold

Breastfeeding

- Unless other contraindications co-exist or baby going for adoption, strongly recommend breastfeeding (see **Breastfeeding** guideline)
- Support mother in her choice of feeding method

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- Give mother all information she needs to make an informed choice about breastfeeding
- Drugs of misuse do not, in general, pass into breast milk in sufficient quantities to have a major effect in newborn baby
- Breastfeeding will certainly support mother in feeling she is positively comforting her baby, should he/she be harder to settle

Infections

- Follow relevant guidelines for specific situations, such as HIV, hepatitis B or hepatitis C positive mothers [see **Human immunodeficiency virus (HIV)** guideline and **Hepatitis B and C** guideline]
- Give BCG immunisation where indicated (see **BCG immunisation** guideline)

ASSESSMENT CHART

- Chart available for download from [West Midlands Neonatal Operational Delivery Network website: <https://www.networks.nhs.uk/nhs-networks/west-midlands-neonatal-operational-delivery/neonatal-guidelines/supporting-links-guidelines-book-2019-2021>](https://www.networks.nhs.uk/nhs-networks/west-midlands-neonatal-operational-delivery/neonatal-guidelines/supporting-links-guidelines-book-2019-2021)
- Aim of treatment is to reduce distress and control potentially dangerous signs
- Minor signs (e.g. jitters, sweating, yawning) do **not** require treatment

Has baby been inconsolable with standard comfort measures (cuddling, swaddling, or non-nutritive sucking) since last feed, had profuse vomiting or loose stools, had an unco-ordinated suck requiring tube feeds or had seizures?

Place a tick in yes or no box (do not indicate any other signs in boxes)

Date						
Time	04:00	08:00	12:00	16:00	20:00	24:00
Yes						
No						

DISCHARGE AND FOLLOW-UP

Babies who required treatment

- Ensure discharge planning involving:
 - social worker (may not be needed if prescribed for pain relief and no other concerns)
 - health visitor
 - **community neonatal team** if treated at home after discharge
 - **drug rehabilitation team** for mother
- If seizures occurred or treatment was required, arrange follow-up in named consultant's clinic **or as per local protocol**

Babies who did not require treatment

- If no signs of withdrawal, discharge **after 96 hr**
- Arrange follow-up by GP and health visitor and advise referral to hospital if there are concerns
- Clarify need for any ongoing social services involvement