

ABSTINENCE SYNDROME

RECOGNITION & ASSESSMENT

Definition

Neonatal withdrawal/abstinence syndrome

- Symptoms evident in infants born to opiate-dependent mothers (generally milder with other drugs)

Timescale of withdrawal

- Withdrawal from opiates (misused drugs, such as heroin) can occur <24 hr after birth
- Withdrawal from opioids (prescribed drugs, such as methadone) can occur 3-4 days after birth, occasionally up to 2 wk after birth
- Multiple drug use can delay or confuse withdrawal signs

Minor signs

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

Major signs

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

AIMS

- To identify withdrawal symptoms following birth
- To keep baby as comfortable as possible
- To give effective medical treatment where necessary
- To promote bonding and facilitate good parenting skills
- To end physical dependence on drugs

Antenatal issues

- Where possible, check maternal hepatitis B, hepatitis C and HIV status and decide on management plan for baby

Management of labour

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

IMMEDIATE TREATMENT

Delivery

- **Do not give naloxone** as this can exacerbate the withdrawal symptoms

- Care of baby should be 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 preterm infants (advocacy and contraindications)** guideline)

After delivery

- Transfer to postnatal ward as usual and commence normal care
- Admit to neonatal unit only if there are clinical indications
- Keep babies who are not withdrawing, feeding well and have no child protection issues with their mothers in the postnatal wards
- Babies who are symptomatic enough to require pharmacological treatment may not require admission to the neonatal unit (treatment can be started on the postnatal ward) – assess each case on an individual basis and refer to local procedures
- Start case notes
- Take a detailed history, including:
 - social history, to facilitate discharge planning
 - maternal hepatitis B & C & HIV status
- Postnatal baby check and daily review by paediatrician

***Check maternal notes for case conference recommendations and discuss care plan for discharge with drug liaison midwife
As symptoms of withdrawal can be delayed, keep baby in hospital for at least 4 days***

SUBSEQUENT MANAGEMENT

- The aims of managing an infant 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

Comfort, not sedation

- Ensure baby reviewed daily by paediatric staff
- Avoid giving pharmacological treatment to babies with minor signs
- Start treatment (after other causes excluded) if there is:
 - recurrent vomiting
 - profuse watery diarrhoea
 - requirement for tube feeds
 - inconsolability after 2 consecutive feeds
 - convulsions
- 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 most effective way to relieve symptoms
- When there has been multiple drug usage, phenobarbital may be more effective
- Use chloral hydrate as required for distress

Opioids

- Start morphine 40 micrograms/kg orally 4 hrly – increasing the dose by 20 micrograms/kg increments if authorised by senior paediatrician
- If baby feeding well and settling between feeds, double dose interval, then reduce dosage by 10% every 24 hr – see assessment chart below
- If major signs continue, discuss with senior paediatrician
- Consider need for other medication (e.g. chloral hydrate)

Phenobarbital

- For treatment of convulsions give 20 mg/kg IV loading dose over 20 min, then maintenance 4 mg/kg orally daily

Chloral hydrate

- Give 30 mg/kg orally, up to 6 hrly as required

Chlorpromazine

- For babies of mothers who use benzodiazepines, give 1 mg/kg orally 8 hrly
- If control has not been achieved with morphine, give 0.5–1 mg/kg orally 8 hrly as general sedative
- remember that chlorpromazine can reduce seizure threshold

Breastfeeding

- Unless other contraindications co-exist or baby going for adoption, recommend breastfeeding strongly – see **Breastfeeding preterm infants (advocacy and contraindications)** guideline
- Support mother in her choice of feeding method
- Give mother all information she needs to make an informed choice about breastfeeding
- Drugs of misuse in general do not pass into breast milk in sufficient quantities to have a major effect in the newborn baby
- Breastfeeding will certainly support mother in feeling that she is positively comforting her baby, should he/she be harder to settle

Infections

- Follow relevant guidelines for specific situations, such as HIV or Hepatitis B positive mothers
- Give BCG immunisation where indicated

ASSESSMENT CHART

- Aim of treatment is to reduce distress and control potentially dangerous signs
- Minor signs (e.g. jitters, sweating, yawning) do **not** require treatment
- Consider treatment (after other causes excluded) if there is:
 - profuse vomiting
 - profuse watery diarrhoea
 - requirement for tube feeds
 - infant inconsolable after two consecutive feeds (see below)

MONITORING

Has baby been inconsolable with standard comfort measures (cuddling, swaddling, or use of dummy) since the last feed?

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

Date						
Time	4:00	8:00	12:00	16:00	20:00	24:00
Yes						
No						

- Record other symptoms, such as vomiting, diarrhoea

DISCHARGE POLICY

Babies who required treatment

- Ensure discharge planning involving:
 - social worker
 - health visitor
 - community neonatal team if treated at home after discharge
 - drug rehabilitation team
- If seizures or abnormal cranial ultrasound, arrange follow-up in the named consultant's developmental clinic

Babies who did not require treatment

- If no signs of withdrawal, discharge by 4-5 days

- Arrange follow-up by GP and health visitor, advise referral to hospital if there are concerns