ABSTINENCE SYNDROME

RECOGNITION AND ASSESSMENT

Definition

Neonatal withdrawal/abstinence syndrome

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

Timescale of withdrawal

- Signs of withdrawal from opiates (misused drugs, such as heroin) can occur <24 hr after birth
- Signs of 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, confuse and intensify 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

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

Check maternal notes for case conference recommendations and discuss care plan for discharge with 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 not required to be present at delivery unless clinical situation dictates

IMMEDIATE TREATMENT

Delivery

- **Do not give naloxone** as this 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 preterm infants (advocacy and contraindications)** guidelines]

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 postnatal wards
- Babies who are symptomatic enough to require pharmacological treatment usually require admission to neonatal unit (refer to local procedures)
- Start case notes
- Take a detailed history, including:
  - social history, to facilitate discharge planning
  - maternal hepatitis B & C & HIV status
- Ensure postnatal baby check and daily review by paediatrician

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

SUBSEQUENT MANAGEMENT

- 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 neonatal staff
- For babies with minor signs (e.g. swaddling), use non-pharmacological management
- Start pharmacological 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

Opioids

- If authorised by senior neonatologist, start morphine 40 microgram/kg orally 4 hrly. Increase dose by 10-20 microgram/kg increments
- If baby feeding well and settling between feeds, reduce 4-hrly dose by 10 microgram/kg every 48 hr. If major signs continue, discuss with senior neonatologist
- Consider need for other medication (e.g. phenobarbital)

Phenobarbital

- For treatment of convulsions give phenobarbital 20 mg/kg IV loading dose over 20 min, then maintenance 4 mg/kg orally daily
- For use as an additional treatment to morphine give phenobarbital 4 mg/kg orally daily. There is no need for a loading dose

Chlorpromazine

- For babies of mothers who use benzodiazepines, give chlorpromazine 1 mg/kg orally 8 hrly

- remember 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 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 C positive mothers
- Give BCG immunisation where indicated

ASSESSMENT CHART

- Chart available for download from SSBC Newborn Network website
- 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?

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

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

- Record other symptoms, such as vomiting, diarrhoea, requirement for tube feeds

DISCHARGE AND FOLLOW-UP

Babies who required treatment

- Ensure discharge planning involving:
  - social worker
  - health visitor
  - community neonatal team if treated at home after discharge
  - drug rehabilitation team for mother
- If seizures occurred or treatment was required after discharge arrange follow-up in named consultant's developmental clinic

Babies who did not require treatment

- If no signs of withdrawal, discharge at day 5
- Arrange follow-up by GP and health visitor and advise referral to hospital if there are concerns