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, 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 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 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)

ABSTINENCE SYNDROME ● 2/3

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
- 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 **HIV** guideline and **Hepatitis B and C** guideline)
- Give BCG immunisation where indicated –(**BCG immunisation** guideline)

ASSESSMENT CHART
- Chart available for download from Staffordshire, Shropshire and Black Country Neonatal Operational Delivery Network website: http://www.networks.nhs.uk/nhs-networks/staffordshire-shropshire-and-black-country-newborn/documents/Abstinence%20ASSESSMENT_CHART.pdf/view?searchterm=abstinence
- 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 at day 5
- 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