

## **Perinatal Anticipatory Symptom Management Guidance**

**Pain and irritability:** The source of discomfort can be difficult to discern in a neonate. If there is a source for pain, consider using opioid. If irritable and restless with no obvious nociceptive pain source, consider using benzodiazepine. Integrate non-pharmacological strategies.

Non-pharmacological strategies include: Skin-to-skin contact, facilitated tucking/swaddling, temperature regulation, non-nutritive sucking, or sucrose (see site specific guidelines).

**Dyspnea** is a *subjective* feeling of breathing discomfort/shortness of breath and may not be correlated with changes in breathing pattern. In a neonate we would assess to determine if the work of breathing, noisy breathing or irregular breathing (gasping, apnea) is accompanied by distress/discomfort (grimacing, crying, restlessness). Opioids can relieve dyspnea by decreasing hyper-responsiveness to hypercapnia and hypoxia, decreasing oxygen consumption and pulmonary vasodilation. Benzodiazepines can relieve dyspnea by decreasing anxiety and restlessness. Trial each of these separately and assess effect. Integrate non-pharmacological strategies.

Non-pharmacological strategies include: Repositioning (head up or side lying/prone), use of a fan (or open window/fresh air), Oxygen (may or may not help)

**Seizures.** New onset seizures although not common, are distressing to witness for family and staff so should be treated promptly.

### **Medication Recommendations:**

**Choice of medication and route:** When symptoms are severe and time is likely short, use medication and route of administration with fast onset. Fentanyl and midazolam are useful as they have fast onset of action when given sublingual or buccal or intra-nasal without requiring IV/subcutaneous access.

If these short acting agents are given repeatedly and symptoms managed, or if symptoms are not as severe and there is time, consider a longer acting agent (morphine/lorazepam).

#### **Pain or dyspnea:**

Fentanyl 1-2 mcg/kg sublingual/buccal/intra-nasal/IV/subcutaneous q15 mins. PRN for pain or dyspnea  
*Or*

Morphine 0.03-0.05 mg/kg IV/subcutaneous q15 mins. PRN for pain or dyspnea.

If longer acting agent required:

Morphine 0.05-0.1 mg/kg PO/buccal/sublingual/rectal q1-4 hrs. PRN

Morphine 0.03-0.05 mg/kg IV/subcutaneous q1-4 hr. PRN

#### **Dyspnea or irritability**

Midazolam 0.1 mg-0.2 mg sublingual/buccal/intra-nasal q15 mins. PRN for dyspnea or irritability

Midazolam 0.05 mg-0.1 mg IV/subcutaneous q15 mins. PRN for dyspnea or irritability

If longer acting agent required:

Lorazepam 0.05 – 0.1 mg sublingual/buccal/PO/IV/subcutaneous q6h pr

#### **Seizures:**

Midazolam 0.2mg-0.3mg buccal/sublingual /intranasal q15 mins. Prn for seizure