N-PASS:
Neonatal Pain, Agitation, & Sedation Scale

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Assessment Criteria	Sedation		Normal	Pain / Agitation	
	-2	-1	0	1	2
Crying Irritability	No cry with painful stimuli	Moans or cries minimally with painful stimuli	Appropriate crying Not irritable	Irritable or crying at intervals Consolable	High-pitched or silent-continuous cry Inconsolable
Behavior State	No arousal to any stimuli No spontaneous movement	Arouses minimally to stimuli Little spontaneous movement	Appropriate for gestational age	Restless, squirming Awakens frequently	Arching, kicking Constantly awake or Arouses minimally / no movement (not sedated)
Facial Expression	Mouth is lax No expression	Minimal expression with stimuli	Relaxed Appropriate	Any pain expression intermittent	Any pain expression continual
Extremities Tone	No grasp reflex Flaccid tone	Weak grasp reflex ↓ muscle tone	Relaxed hands and feet Normal tone	Intermittent clenched toes, fists or finger splay Body is not tense	Continual clenched toes, fists, or finger splay Body is tense
Vital Signs HR, RR, BP, SaO_2	No variability with stimuli Hypoventilation or apnea	< 10% variability from baseline with stimuli	Within baseline or normal for gestational age	↑ 10-20% from baseline SaO_2 76-85% with stimulation – quick ↑	↑ > 20% from baseline $SaO_2 \leq 75\%$ with stimulation – slow ↑ Out of sync with vent

Premature Pain Assessment

+ 3 if < 28 weeks gestation / corrected age
+ 2 if 28-31 weeks gestation / corrected age
+ 1 if 32-35 weeks gestation / corrected age

Assessment of Sedation

- Sedation is scored in addition to pain for each behavioral and physiological criteria to assess the infant's response to stimuli
- Sedation does not need to be assessed/scored with every pain assessment/score
- Sedation is scored from 0 → -2 for each behavioral and physiological criteria, then summed and noted as a negative score (0 → -10)
  - A score of 0 is given if the infant's response to stimuli is normal for their gestational age
- Desired levels of sedation vary according to the situation
  - "Deep sedation" → score of -10 to -5 as goal
  - "Light sedation" → score of -5 to –2 as goal
  - Deep sedation is not recommended unless an infant is receiving ventilatory support, related to the high potential for apnea and hypoventilation
- A negative score without the administration of opioids/ sedatives may indicate:
  - The premature infant's response to prolonged or persistent pain/stress
  - Neurologic depression, sepsis, or other pathology

Assessment of Pain/Agitation

- Pain assessment is the fifth vital sign – assessment for pain should be included in every vital sign assessment
- Pain is scored from 0 → +2 for each behavioral and physiological criteria, then summed
  - Points are added to the premature infant's pain score based on their gestational age to compensate for their limited ability to behaviorally or physiologically communicate pain
  - Total pain score is documented as a positive number (0 → +10)
- Treatment/interventions are indicated for scores > 3
  - Interventions for known pain/painful stimuli are indicated before the score reaches 3
- The goal of pain treatment/intervention is a score ≤ 3
- More frequent pain assessment indications:
  - Indwelling tubes or lines which may cause pain, especially with movement (e.g. chest tubes) → at least every 2-4 hours
  - Receiving analgesics and/or sedatives → at least every 2-4 hours
  - 30-60 minutes after an analgesic is given for pain behaviors to assess response to medication
  - Post-operative → at least every 2 hours for 24-48 hours, then every 4 hours until off medications

Pavulon/Paralysis

- It is impossible to behaviorally evaluate a paralyzed infant for pain
- Increases in heart rate and blood pressure may be the only indicator of a need for more analgesia
- Analgesics should be administered continuously by drip or around-the-clock dosing
  - Higher, more frequent doses may be required if the infant is post-op, has a chest tube, or other pathology (such as NEC) that would normally cause pain
  - Opioid doses should be increased by 10% every 3-5 days as tolerance will occur without symptoms of inadequate pain relief

Scoring Criteria

Crying / Irritability

-2 → No response to painful stimuli, e.g.:
- No cry with needle sticks
- No reaction to ETT or nares suctioning
- No response to care giving

-1 → Moans, sighs, or cries (audible or silent) minimally to painful stimuli, e.g. needle sticks, ETT or nares suctioning, care giving

0 → Not irritable – appropriate crying
- Cries briefly with normal stimuli
- Easily consoled
- Normal for gestational age

+1 → Infant is irritable/crying at intervals – but can be consoled
- If intubated – intermittent silent cry

+2 → Any of the following:
- Cry is high-pitched
- Infant cries inconsolably
- If intubated – silent continuous cry

Behavior / State

-2 → Does not arouse or react to any stimuli:
- Eyes continually shut or open
- No spontaneous movement

-1 → Little spontaneous movement, arouses briefly and/or minimally to any stimuli:
- Opens eyes briefly
- Reacts to suctioning
- Withdraws to pain

0 → Behavior and state are gestational age appropriate

+1 → Any of the following:
- Restless, squirming
- Awakens frequently/easily with minimal or no stimuli

+2 → Any of the following:
- Kicking
- Arching
- Constantly awake
- No movement or minimal arousal with stimulation (inappropriate for gestational age or clinical situation, i.e. post-operative)

Facial Expression

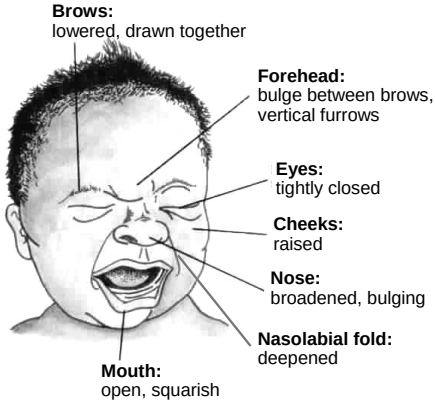
-2 → Any of the following:
- Mouth is lax
- Drooling
- No facial expression at rest or with stimuli

-1 → Minimal facial expression with stimuli

0 → Face is relaxed at rest but not lax – normal expression with stimuli

+1 → Any pain face expression observed intermittently

+2 → Any pain face expression is continual



Facial expression of physical distress and pain in the infant

Extremities / Tone

-2 → Any of the following:
- No palmar or planter grasp can be elicited
- Flaccid tone

-1 → Any of the following:
- Weak palmar or planter grasp can be elicited
- Decreased tone

0 → Relaxed hands and feet – normal palmar or sole grasp elicited – appropriate tone for gestational age

+1 → Intermittent (<30 seconds duration) observation of toes and/or hands as clenched or fingers splayed
- Body is *not* tense

+2 → Any of the following:
- Frequent (≥30 seconds duration) observation of toes and/or hands as clenched, or fingers splayed
- Body is tense/stiff

Vital Signs: HR, BP, RR, & O_2 Saturations

-2 → Any of the following:
- No variability in vital signs with stimuli
- Hypoventilation
- Apnea
- Ventilated infant – no spontaneous respiratory effort

-1 → Vital signs show little variability with stimuli – less than 10% from baseline

0 → Vital signs and/or oxygen saturations are within normal limits with normal variability – or normal for gestational age

+1 → Any of the following:
- HR, RR, and/or BP are 10-20% above baseline
- With care/stimuli infant desaturates minimally to moderately (SaO_2 76-85%) and recovers quickly (within 2 minutes)

+2 → Any of the following:
- HR, RR, and/or BP are > 20% above baseline
- With care/stimuli infant desaturates severely (SaO_2 < 75%) and recovers slowly (> 2 minutes)
- Infant is out of synchrony with the ventilator – fighting the ventilator

We value your opinion.
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