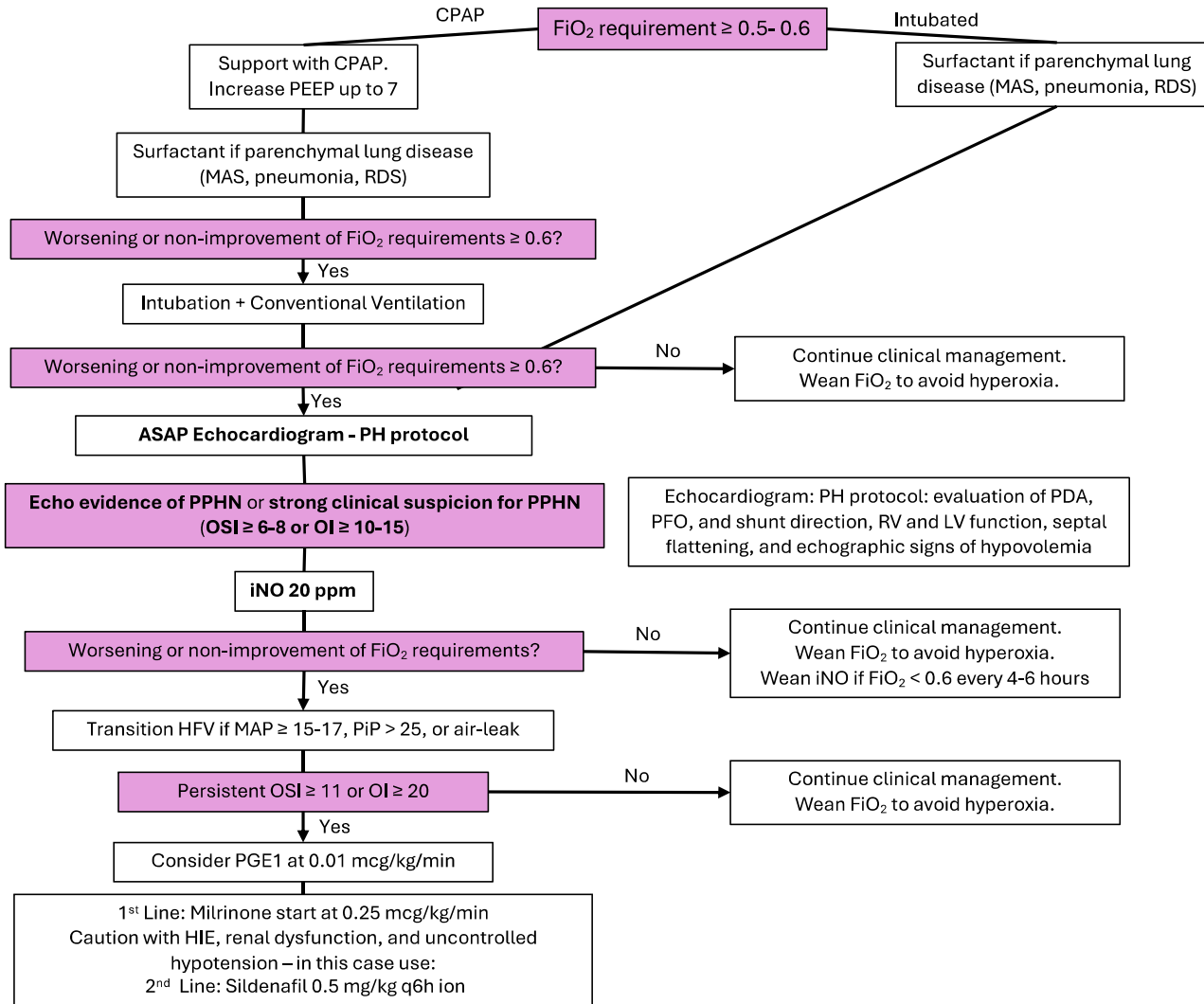


Initial Management of Term and Near Term (> 35 weeks) Infant with Hypoxemic Respiratory Failure in the first 48 hours of life



General Management for All Infants requiring FiO2 ≥ 0.6

- Quiet and Dark Room
- Pre- and Post- Ductal Oxygen Saturation Monitoring
- Goal: **Pre-ductal SpO2: 92–97%**
- Wean FiO2 by at least 2-5% every 10-15 mins if **pre-ductal SpO2 ≥ 94%**
 - **Do not use PaO2 levels to wean FiO2 as those are post ductal and often reflective of a prior state of infant, while SpO2 is reflective of current clinical status**
- PaO2: 50-80 mmHg
- PaCO2 goal: 45-60 mmHg, pH ≥ 7.25
- iCa goal (if hypotension): ≥ 1.2
- Consider placement of UAC and UVC early in the course. If able, consider obtaining right upper extremity PAL line (LIMIT TO 2 ATTEMPTS).

$$OSI = MAP \times FiO_2 / SpO_2^*$$

OSI 6 ≈ OI 10
 OSI 8 ≈ OI 15
 OSI 11 ≈ OI 20
 OSI 14 ≈ OI 25

*JAMA Network Open. 2019;2(3):e191179.

Indications for intubation:
 FiO2 > 0.5 despite surfactant
 FiO2 ≥ 0.8 persistently
 PaCO2 > 60 mmHg in 2 or more gases, with pH < 7.2

Sedation / Analgesia

Dexmedetomidine 0.2 to 0.5 mcg/kg/hour Increase by 0.1 mcg/kg/hour every 30 mins up to 1.2 mcg/kg/hour
 or
 Fentanyl 1 mcg/kg/hour. Increase by 0.5 mcg/kg/hour up to 2 mcg/kg/hour
 *If hypotension or HR > 180 bpm, preference for Dexmedetomidine

If persistent OSI ≥ 14 or OI ≥ 25,
 consider Vecuronium Bolus of 0.1 mg/kg
 or
 Infusion of 1 mcg/kg/min.
 Transfer to CMC

Advanced Care of Hypoxemic Respiratory Failure

Hemodynamic Management in the first 48 hours of life

