Ventilator

Things to pay attention to

- Four Primary Settings
  - FIO2
  - PEEP
  - Minimum RR
  - Tidal Volume (if volume controlled) / Pressure support (if pressure controlled)
- Other important numbers
  - Actual respiratory rate
  - Peak / Plateau pressures

FAQ

- How to set FiO2?
  - Start with 100% and titrate down.
- How to set respiratory rate?
  - 12-16 is good starting point.
  - Set it high enough to keep up with metabolic rate. If in a catabolic process such as sepsis, patient will need higher rate.
  - Set it high enough to avoid hypercapnia.
  - Set it low enough so patient is able to initiate few breaths beyond the set rate.
- How to set tidal volume?
  - Start with 6-8 mL / kg (ideal body weight). Then titrate in accordance with plateau pressures and needed minute ventilation
- How to set PEEP?
  - Start with 5 mmHg and titrate up. Use this to come down on FiO2
- Is there a maximum PEEP?
  - Not really. Just keep plateau pressures under control (< 30)

Extubation Criteria

- Start with spontaneous breathing trial
  - Check spontaneous breathing index (SBI) = $\frac{Respiratory\ Rate}{Tidal\ Volume\ (in\ Litres)}$
  - Is respiratory rate low enough (ideally under 30)
  - Is patient pulling good tidal volume?
- Is mental status adequate to secure airway after extubation?
- Excessive secretions?
- Good cuff leak? (rule out tracheal edema)

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