Ventilator Breath Modes
Revel Breath Types are Different from Breath Modes!

- Volume Control
- Pressure Control
- Pressure Regulated Volume Control (PRVC)
Revel Breath Modes

- Assist Control (A/C)
- Synchronized Intermittent Mandatory Ventilation (SIMV)
- Continuous Positive Airway Pressure + Pressure Support (CPAP+PS)
Revel Breath Modes
Assist Control

• Mode that provides a minimum # of breaths as set **(control)**, but allows additional pt triggered breaths at set **volume or pressure or Pressure Regulated Volume Control (PRVC)** to be provided **(assist)**.

• If cycle time elapses with out pt triggered breath, the machine will deliver a mandatory breath.
  – Clinician determines the minimum minute ventilation by setting **volume** or **pressure** or **PRVC** and respiratory rate.
  – Mode that requires least effort from patient.
Synchronized Intermittent Mandatory Ventilation (SIMV)

- Mode used to assist pt’s who have some, but not sufficient breathing and can be used for weaning.
  - Periodic assisted mechanical ventilations synchronized with the patients own breathing.
  - Ventilator will provide breath if pt fails to do so within the set interval.
  - Synchronization attempts to limit baro-trauma when a preset breath is delivered to a patient who has inhaled or is exhaling (breath stacking).
  - Ventilator detects pt’s own breath and delays the machine breath.
Synchronized Intermittent Mandatory Ventilation (SIMV)

- Unlike Assist Control (AC) ventilation, in SIMV any spontaneous breathing by pt does not result in a volume or pressure machine delivered breath - the patient gets what he/she can get for tidal volume.
- SIMV can lead to a much higher work of breathing due to ineffective spontaneous ventilation.
- Addition of Pressure Support, supplements ineffective spontaneous ventilation in SIMV mode.
Continuous Positive Airway Pressure + Pressure Support (CPAP+PS)

• Basically PEEP
  – No set cycle time
  – Ventilator provides no breaths.

• Used mainly in Non-Invasive Positive Pressure Ventilation (NPPV), but may also be used with invasive ventilation.

• CPAP + PS: set level of pressure with the addition of pressure support level to supplement inspiratory pressure when spontaneous ventilations occur.

• Patient must have intact respiratory drive.
May what to skip this Chinese Joint!