DID YOU KNOW?

Mandatory Minute Ventilation - MMV

What is it?

MMV is a Volume-controlled ventilation to ensure mandatory minute ventilation.

MMV works similar to SIMV, however, the mandatory breaths are only provided if spontaneous breathing is not sufficient and below the prescribed minimum ventilation. Should spontaneous breathing increase, fewer mandatory breaths will be provided. The minimum ventilation is determined by the setting of the tidal volume VT and the respiratory rate RR.

When should MMV be applied?

- Uncomplicated cases of respiratory failure (i.e. following resolution of drug induced coma)
- Post operative period: emerging from anaesthesia
- Bedside procedures requiring sedation and/or NMBAs
- Recovered, acute pulmonary process
- No intrinsic lung disease or resolved lung disease

Why is it helpful to improve outcome?

- VC-MMV is improving outcomes being:
  - Supportive: with full synchronization with the patient, allowing spontaneous breath with a "safety net"(1), speeding up weaning, saving up to one day in the ICU(3)
  - Automatic: switching from full to partial ventilation support with no intervention(2), freeing clinicians for other patient care activities(2,4), allowing "automatic weaning"(4)
  - Safe: with stable tidal and minute volume, preventing hypoventilation

References: