Guidelines for NON - CRITICAL CARE staff

Use of APRV ventilation in Intensive Care

- APRV (Airway Pressure Release Ventilation) is an advanced respiratory ventilation therapy for severe respiratory failure with refractory hypoxemia.
- APRV will be prescribed and set by a SENIOR clinician – Consultant or Registrar level

- **Non-ICU staff must not alter any settings**

MAIN SETTINGS FOR APRV

THigh
- Set at 4-8secs - period of time that lung is inflated
- used to control O2 and CO2 levels

TLow
- set 0.4 - 0.8 seconds - time for air to 'escape' the lung
- time for CO2 clearance

PHigh
- set from 20-30mbars - used to create lung inflation and improve gas exchange
- pressure held throughout THigh to 'open' the lung

PLow
- ALWAYS set at 0mbars

NB: we do NOT set a respiratory rate in APRV

ADDITIONAL POINTS:

- 'Tube compensation' must be set at 100% and for correct tube size.
- Short catheter mounts must be used. 'Dead space' should be minimised.
- ET tube should be CLAMPED when breaking circuit for HME or catheter mount change.
- Patient respiratory pattern may look 'odd' as this therapy does not set a 'normal looking' respiratory pattern – there are not traditional breaths in & out.

ICU Guidelines for APRV are found on the info ICU page:

Infonet > critical care unit > clinical guidelines > APRV

A simple PowerPoint guide to APRV is on the TDrive:

TDrive >critical care units > EDUCATION (nurses) > ventilation > APRV

Practice Education Team BSUH Critical Care 2020

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DAILY MANAGEMENT

- Confirm OXYGEN, CO2, SaO2 and pH targets on daily ward round.
- Patient may need regular nebs (bronchodilators and saline) to keep tube and airways clear and ensure good lung deflation.
- Patient is a HIGH RISK airway – someone MUST hold/manage the OETT when repositioning the patient.
- If you need to break the circuit to change an HME/suction set/catheter mount – this is a 2 person technique and the ET tube must be clamped whilst you do this.