

# END-TIDAL CO<sub>2</sub>



ETCO<sub>2</sub> IS A MEASUREMENT OF THE PARTIAL PRESSURE OF CO<sub>2</sub> IN THE GAS SAMPLE AT THE **END** OF EXPIRATION. IT PROVIDES A NUMERIC VALUE OF EXHALED CARBON DIOXIDE. IT IS AFFECTED BY VENTILATION, PERFUSION AND METABOLISM. NORMAL ETCO<sub>2</sub> IN THE ADULT PATIENT SHOULD BE **35-45 MMHG**.

## FOUR MAIN USES FOR ETCO<sub>2</sub>

- TUBE CONFIRMATION
- MONITORING DURING CARDIAC ARREST
- CONTINUOUS MONITORING DURING INTUBATION
- MONITORING DURING PROCEDURAL SEDATION

## VANKONG ETCO<sub>2</sub> CARDIAC ARREST PEARLS

- ETCO<sub>2</sub> SHOULD BE USED TO CONFIRM ETT PLACEMENT
  - ETCO<sub>2</sub> BECAME A **LEVEL 1 RECOMMENDATION BY AHA** IN 2010 FOR TUBE CONFIRMATION IN PATIENTS UNDERGOING CPR.
  - BE AWARE ETCO<sub>2</sub> CAN BE NORMAL WITH A RIGHT MAIN STEM INTUBATION.
- ETCO<sub>2</sub> > 20 SUGGESTS GOOD QUALITY CPR
- CONSIDER AN ABRUPT INCREASE TO A NORMAL VALUE OR INCREASE OF 10MMHG AS AN EARLY INDICATOR OF ROSC
- ETCO<sub>2</sub> CAN HELP GUIDE THE DECISION TO TERMINATE THE RESUSCITATION. ETCO<sub>2</sub> LESS THAN **10** SUGGESTS INADEQUATE CPR OR A **LOW LIKELIHOOD OF SURVIVAL AT THE 20 MIN MARK**.

**>20 MMHG AT 20 MINUTES CPR -> HIGHER CHANCE OF ROSC**  
**< 10 MMHG AT 20 MINUTES CPR -> ALMOST NO CHANCE OF ROSC**

