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AP

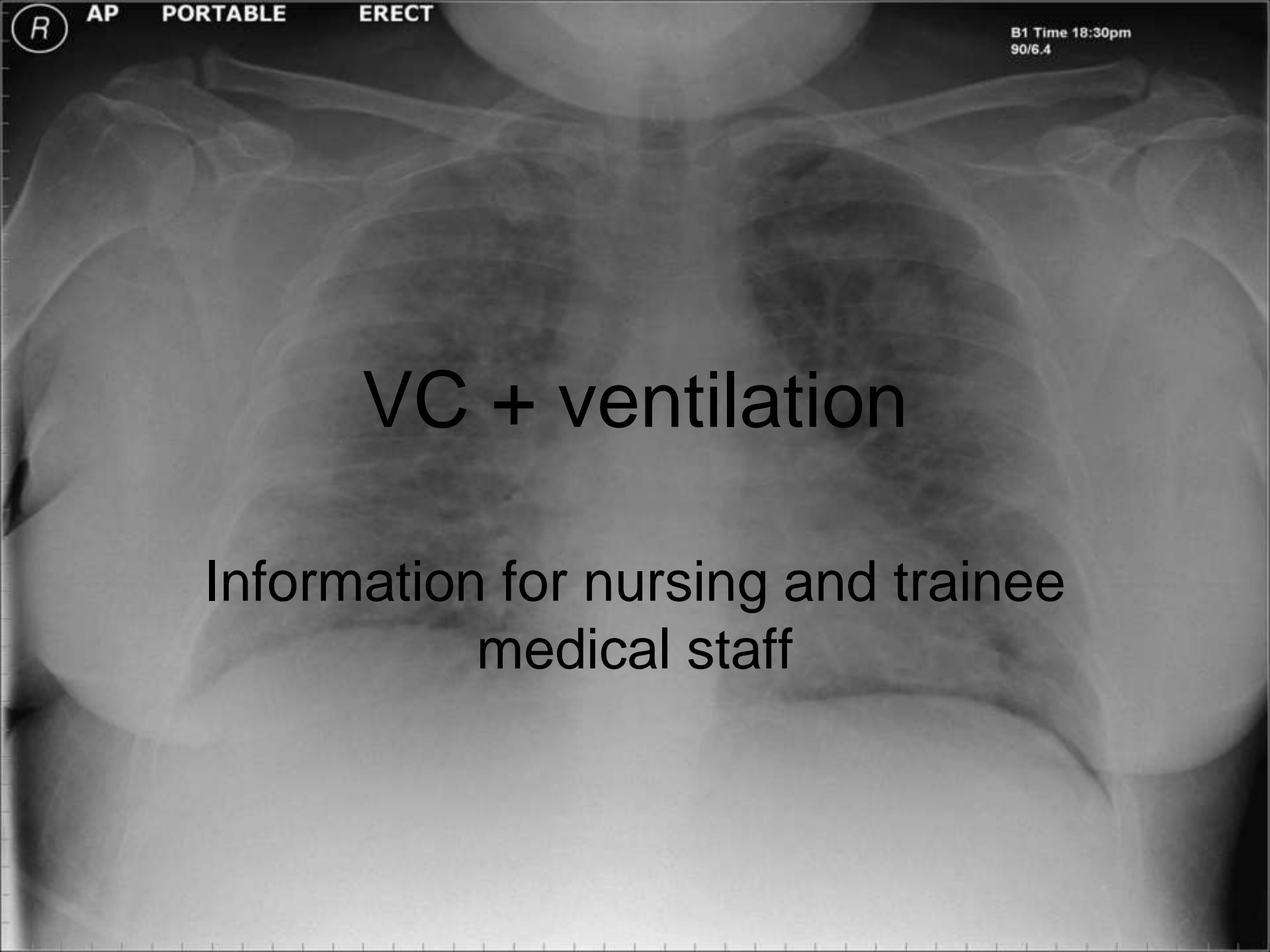
PORTABLE

ERECT

B1 Time 18:30pm
90/6.4

VC + ventilation

Information for nursing and trainee
medical staff



VC + ventilation (Volume control plus ventilation)

- VC+ ventilation is an alternative method of ventilation used to ventilate patients with ARDS.
- In VC+ ventilation the medical staff set a tidal volume that they would like the patient to receive- in ARDS this is based on the patient's ideal body weight and gender using the TV calculator on the web site.
- The ventilator then delivers this using the most efficient pressure wave form that it can to minimise trauma to the lung tissue
- This is different from pressure controlled ventilation that we normally use where the pressure is set and the tidal volume will change dependant on the patient's lung function.

For a more detailed understanding of ARDS and methods of ventilation:

- This presentation is aimed to explain about VC+ ventilation but you can't really understand it without some additional back ground knowledge.
- There are a series of e-learning packages about ventilation and ARDS on the ICU web page in the e-learning section.
- These can be viewed at work or at home- the links will work anywhere.
- They are a series of talks with sound- they can be listened to in short chunks or as whole lectures and most have certificates that you can print out to put in your portfolios.

Volume Control +

- Clinician sets inspiratory time and TV
- Ventilator delivers a single test breath, with decelerating flow pattern and plateau to determine relative lung compliance
- If delivered TV is greater or less than preset TV, the target pressure for subsequent breaths are adjusted

Advantages VC+

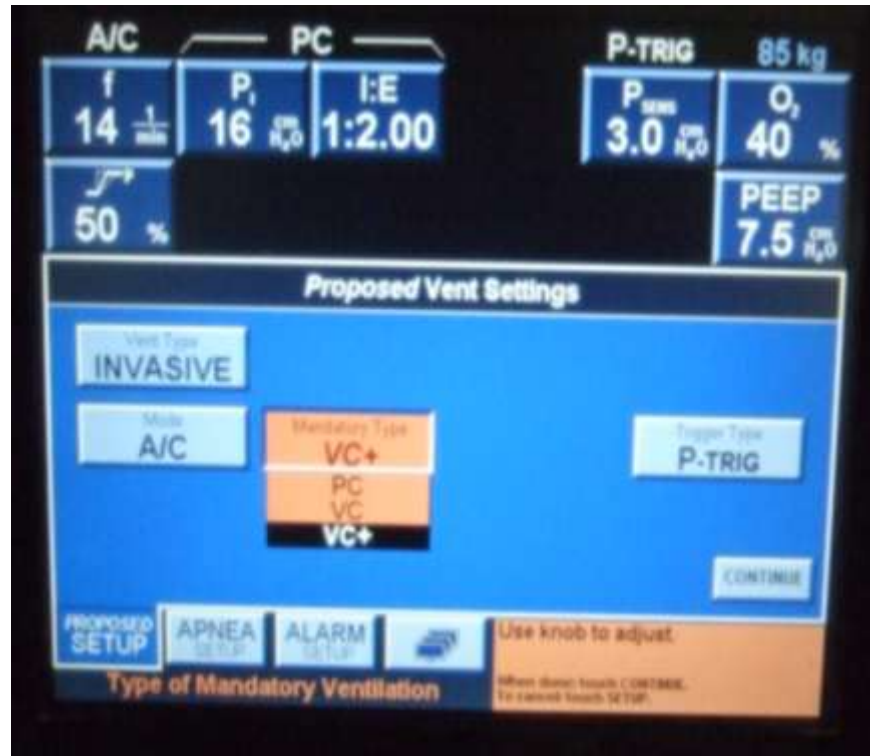
- Delivers a specific operator defined tidal volume
- Pressure control style of breath allows for spontaneous breathing during inspiratory phase of the mandatory breath
- Breathing, coughing, splinting allowed by venting excess pressure
- Flow determined automatically
- Pressure adjustment minimises risk of large pressure and TV swings caused by sudden and momentary changes in compliance

Setting up VC+ ventilator

- VC+ option is on all ventilators above letter R- here is vent V



VC+ on our unit



As with other modes default setting is inspiratory time which gives a very long expiratory time



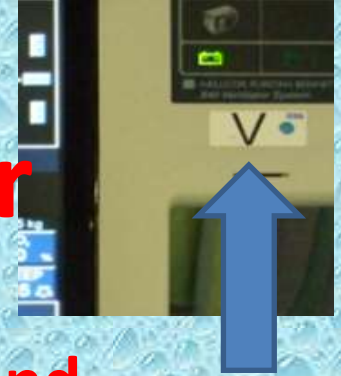
This can be adjusted to a more appropriate setting as with other modes of ventilation



Policy

- When a patient is identified as having ARDS or a significant potential to develop it, and they need AC ventilation:
- This is confirmed on the calculator and results recorded in the patient isoftware record ARDS should also be added as a health issue.
- They are transferred on to a ventilator from R to W (marked with the VC+ sign).
- There is a ventilator ready to do this in the equipment bay of pod A with a sign as in the next slide.
- They have their ARDS net TV calculated and they are ventilated with a TV within this range using VC+ mode until they are ready to wean to spont.
- When ready to wean they can be changed to another method of ventilation- e.g. Pressure support.

ARDS Standby Ventilator



- This ventilator is a ventilator lettered R to Z and should be kept on Pod A next to the defib to be ready to provide VC+ ventilation to a patient with ARDS.
- For an explanation of VC+ ventilation and information about ARDS see the ICU web site under the section 'E-Learning'
- If you use the ventilator ask for another ventilator from the equipment store letter R to Z to be the new ARDS standby ventilator
- The picture shows where the letter code is on the front of the ventilator