

Review/Update

Convenient, or Costly? The issues of CPAP devices with integrated nebulization.

In this day and age we sometimes forget that convenience often comes at a cost. The cost increase is often justified in terms of time saving during the ordering of product from suppliers (only one part number), or in stocking of the vehicle (only one item to pick). However, the perceived cost saving can often be easily frittered away when we buy items we do not need for the majority of our patients just because they come “conveniently packaged” with the main device.

One such area of convenience v cost is in the area of single use CPAP devices. There are a number of companies now offering their CPAP device packaged with nebulizers and even ETCO₂ cannulas. With a generally accepted average of only 28% of patients treated with CPAP receiving nebulized medications, either of these additional items may be routinely discarded .

There is also the risk of potentially compromising patient care when integrated nebulizers are used. Some of these nebulizers gain their powering flow from the same outlet as the CPAP device. This detracts from the oxygen flow through the CPAP device which reduces the CPAP level potentially compromising patient care if the operator does not increase the flow to the CPAP device to compensate¹. In addition, in some devices, when the nebulizer is used, the CPAP pressure is limited due to insufficient flow being available. This may mean that the CPAP cannot be raised to the effective therapeutic level that was being administered to the patient prior to the administration of the nebulized medication². This unduly compromises

patient care, simply for the sake of convenience.

When choosing your therapeutic devices, product efficacy must always be weighed against simple convenience. This is especially true when that convenience comes at a cost, not only financial, but also in terms of patient care.

References

1. Mercury Medical Flowsafe II_{EZ} product information:
CAUTION: CPAP pressure will decrease when nebulizer is activated and increase when nebulizer is deactivated.
2. Mercury Medical Flowsafe II_{EZ} product information:
6 - 15 L/min flow range:
Nebulizer off: CPAP 2 - 12 cm H₂O.
Nebulizer on: CPAP 1 - 5 cm H₂O