

RAH protocol for the initiation of BiPAP NIV

Criteria for commencing BiPAP:

- Known or likely exacerbation of COPD with acidotic type 2 respiratory failure
- Completed 1 hour of standard medical therapy including controlled oxygen
- Not an immediate candidate for invasive ventilation
- Pneumothorax excluded on CXR

Initial arterial blood gas before commencing BiPAP NIV:

Time	FiO ₂	H ⁺	P _O ₂	PC _O ₂	HC _O ₃	Lactate

Initial settings IPAP: 10, EPAP: 4, Rise Time 1, Rate: 12/min.

- Increase IPAP by 2 cmH₂O every 3-5 mins, aiming for IPAP of 20 if tolerated.
- EPAP may need to increase if obvious snoring or obese patient, though **never more than 6 cmH₂O** (remember to increase IPAP in proportion)

Mask size:	1st	2nd	3rd	4th	5th	6th
	Setting	Setting	Setting	Setting	Setting	Setting
Time						
Inspired oxygen %						
SpO ₂						
IPAP (aim for 20)	10					
EPAP (adjustment not usually required)	4					
Synchronizing (Y/N)						

- Entrain oxygen, aiming for SpO₂ 88-92% and no higher
- Ensure appropriate medical treatment prescribed on Kardex

ABG 1 hour after commencing treatment:

Time	FiO ₂	H ⁺	P _O ₂	PC _O ₂	HC _O ₃	Lactate

- **Hourly observations and GCS required**
- **Patient a candidate for ITU (document in notes)** Yes/No
- **Conversation with family (documented in notes)** Yes/No

More detailed NIV protocol available in GGC therapeutics handbook