

SUPPLEMENTARY MATERIAL

Survey responses to 'What parameters or rules do you use to decide whether hypoventilation is present or absent?'

Answers are given as free text (reproduced verbatim).

1. Rise in CO₂ as monitored transcutaneously of >10 mmHg from wake to sleep where the probe is appropriately calibrated and maintained, TCO₂ >50 mmHg for >25% total sleep time, a clear rise of CO₂ from non rapid eye movement (NREM) to rapid eye movement (REM) of >5 mmHg, sleep breathing, any reflection of high TCO₂ in ETCO₂ tracing
2. Strictly AASM – CO₂ >50 mmHg for >25% of study, also look at rise in CO₂ during REM vs. NREM and from wake to sleep
3. TCO₂ trends, percent time and drift from baseline
4. AASM rules used and criteria outlined in New Zealand Guidelines management sleep disordered breathing document
5. Significant rise in TCO₂
6. Persistent elevation of TCO₂ >50 mmHg with or without oxygen desaturation in the absence of untreated obstructive sleep apnoea (OSA)
7. American Academy of Sleep Medicine (AASM) rule that 25% or more of sleep time TCO₂ >50 mmHg
8. The % CO₂ above 50 mmHg, also take note of mean CO₂ awake and asleep, rise in CO₂ with sleep onset, rise in CO₂ during REM sleep
9. Subjective decision in CO₂>50 mmHg for significant periods
10. TCO₂ >50 mmHg for >25% total sleep time, clear trend of elevated TCO₂ >50 mmHg in REM
11. Presence of CO₂ retention and hypoxia without obvious obstruction
12. >10 mmHg wake to sleep or rise of more than 3 mmHg in REM
13. REM-related hypoventilation by description and rise of CO₂ in REM, nocturnal hypoventilation by 25% or more total sleep time with TCO₂ >50 mmHg
14. pCO₂
15. Changes between states, blood gases
16. Time above 50 mmHg >25% total sleep time, rise >10 mmHg from awake to asleep, increase >3 mmHg from NREM to REM
17. REM related rise in TCO₂