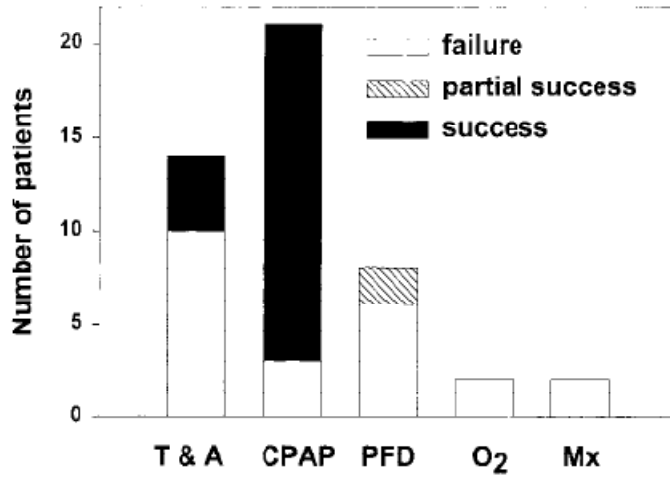


# Management

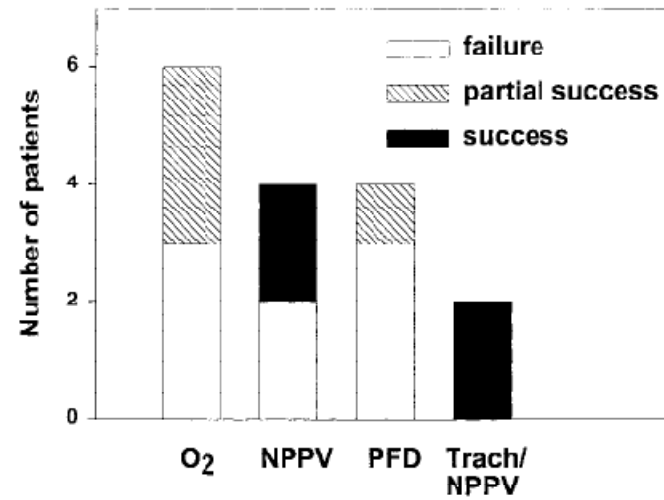
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- Effect of NIPPV in children
  - May stabilize or even improve lung function in non-progressive, slowly progressive diseases [Barois et al 1992& 2005, Canani et al 1997]
  - May stabilize lung function in rapidly progressive diseases [Rideau et al 1995]
  - Mechanism
    - Resting muscles
    - Increased lung compliance
    - Reduced sleep fragmentation [Barbe et al 1996]
    - Resetting of chemoreceptors [Annane et al 1998]

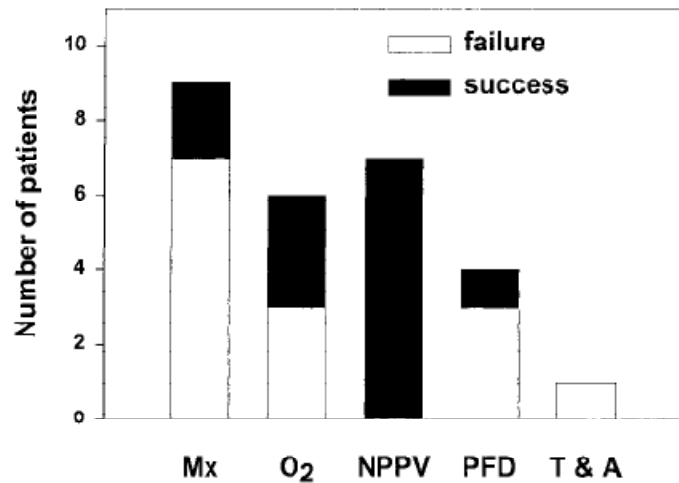
### Obstructive Sleep Apnea



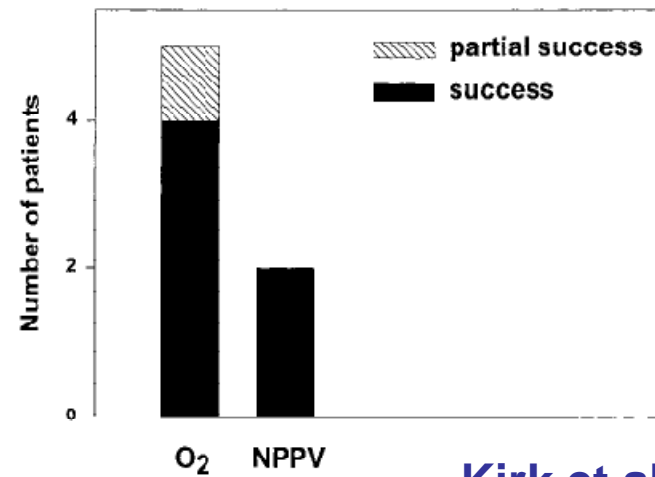
### Central Hypoventilation

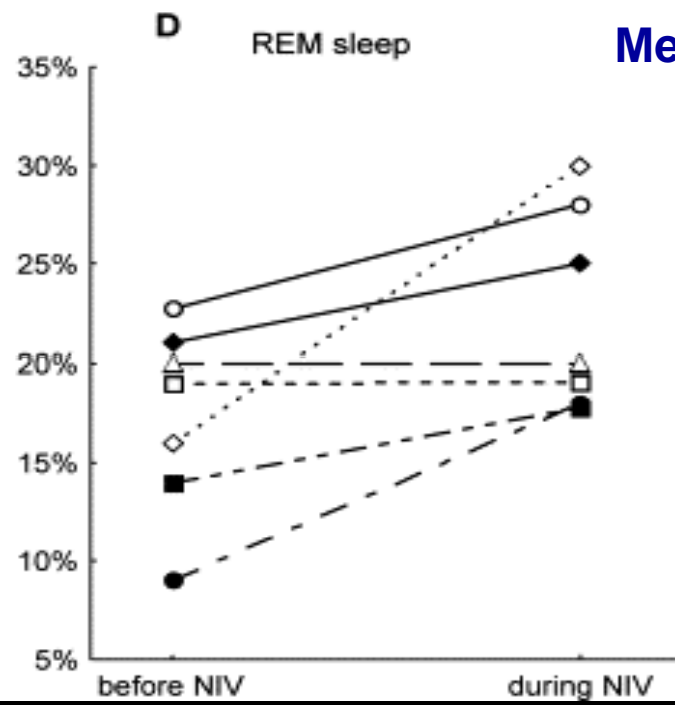
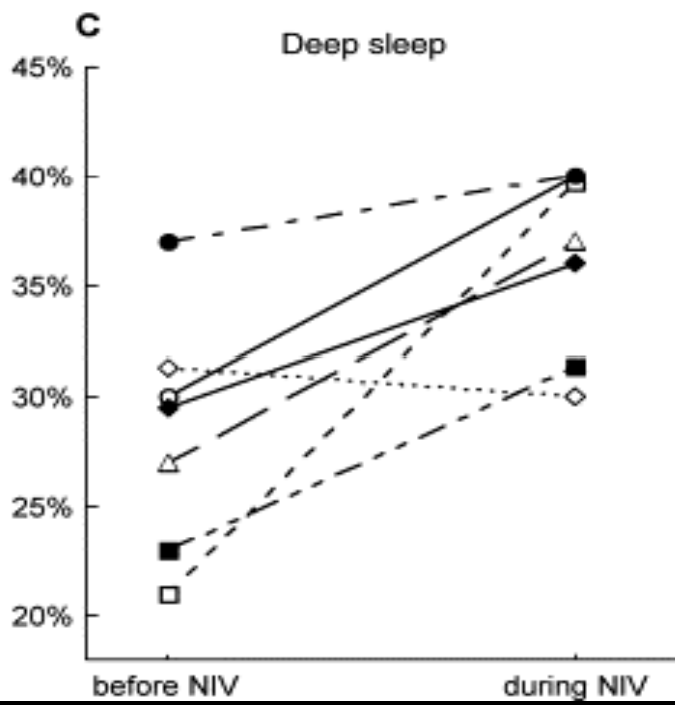
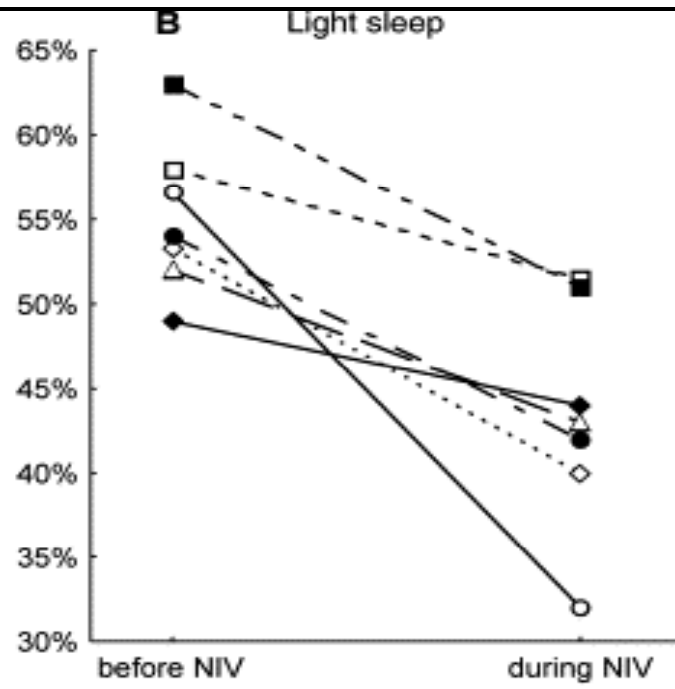
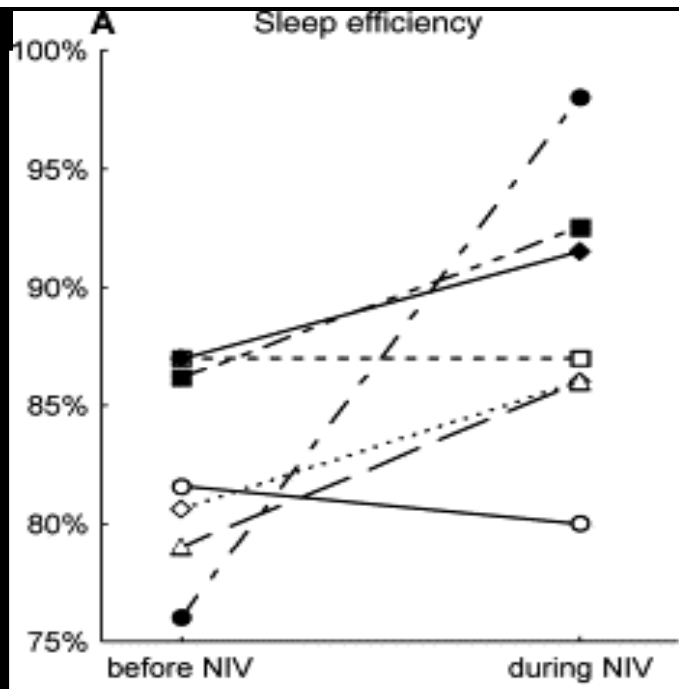


### Central Apnea

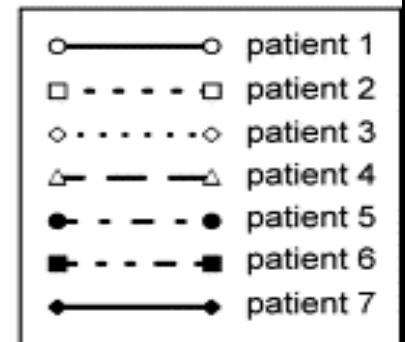


### Sleep-Exacerbated Restrictive Lung Disease

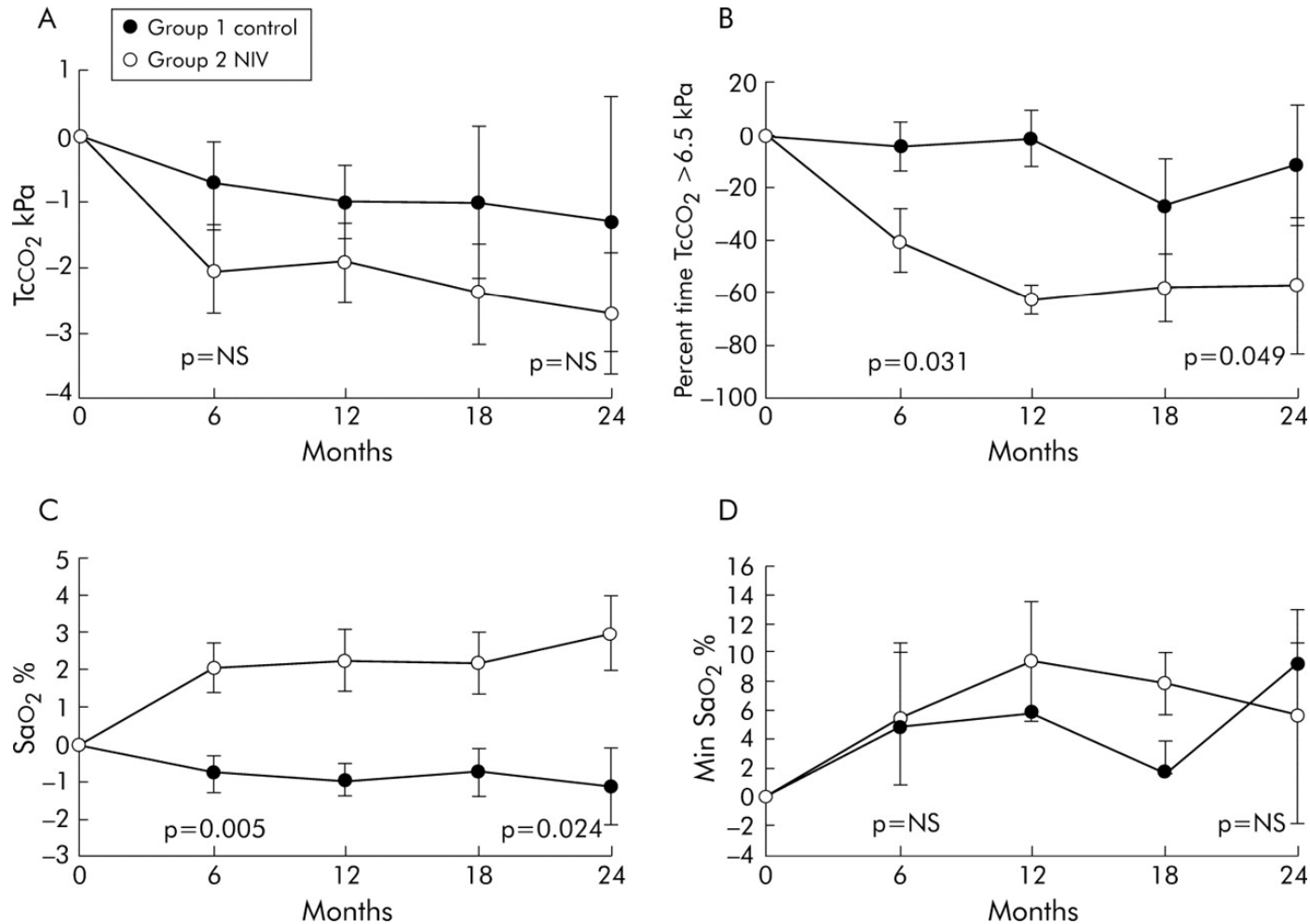




Mellies et al 2004



**Figure 2** Difference between baseline values and those at 6, 12, 18 and 24 months in (A) peak nocturnal TcCO<sub>2</sub>, (B) mean nocturnal time TcCO<sub>2</sub> >6.5 kPa, (C) mean nocturnal SaO<sub>2</sub>, and (D) mean minimum nocturnal SaO<sub>2</sub>; p values given at 6 and 24 months. Error bars represent SE.



Ward, S et al. Thorax 2005;60:1019-1024

