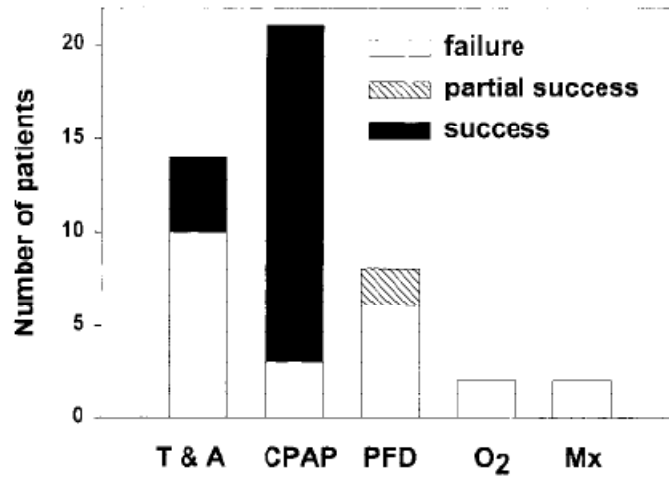


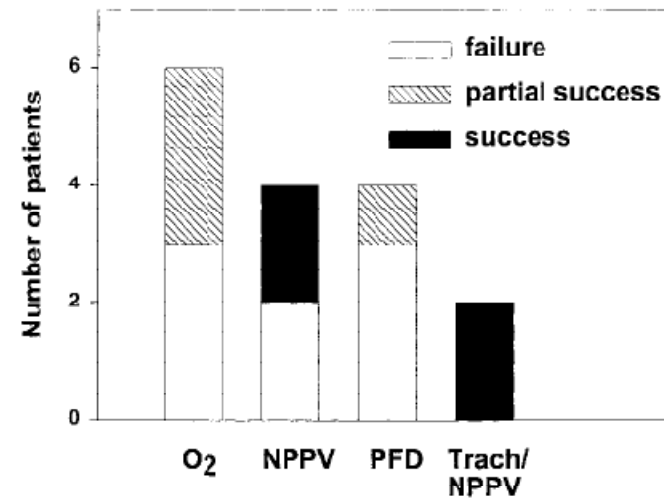
Management

- 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]

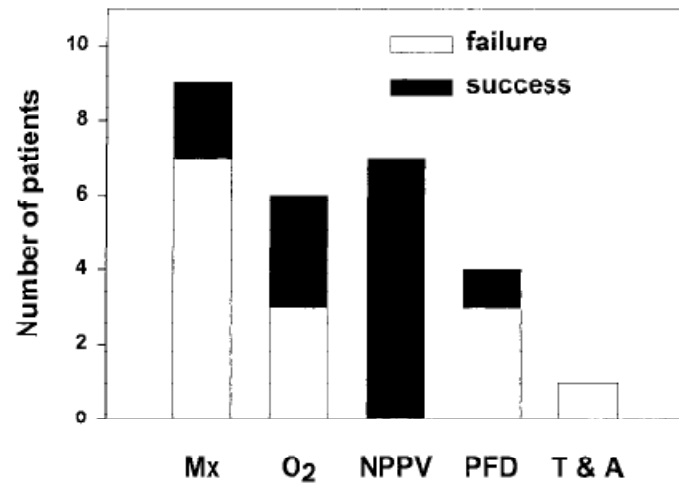
Obstructive Sleep Apnea



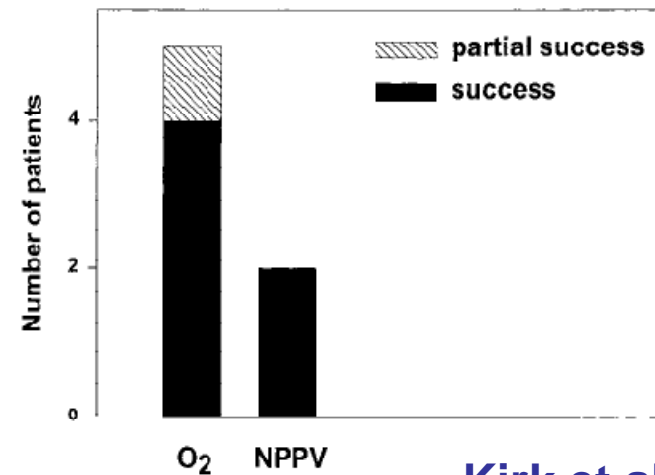
Central Hypoventilation



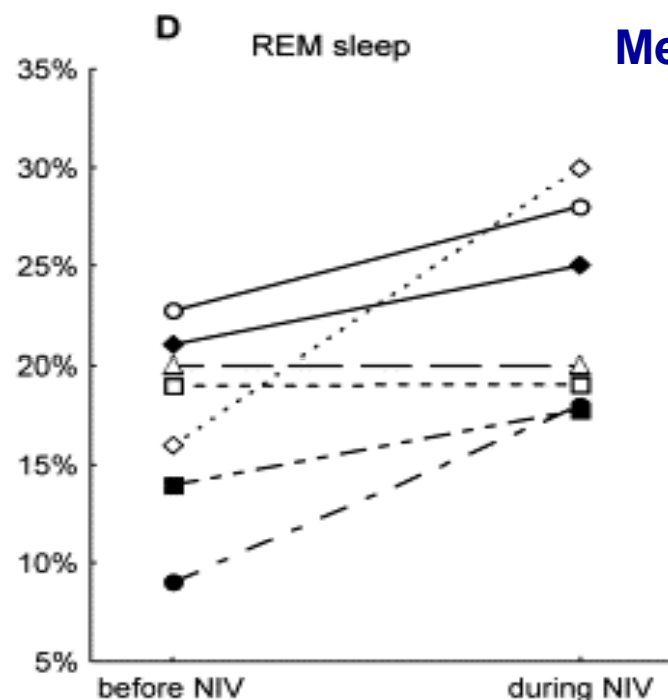
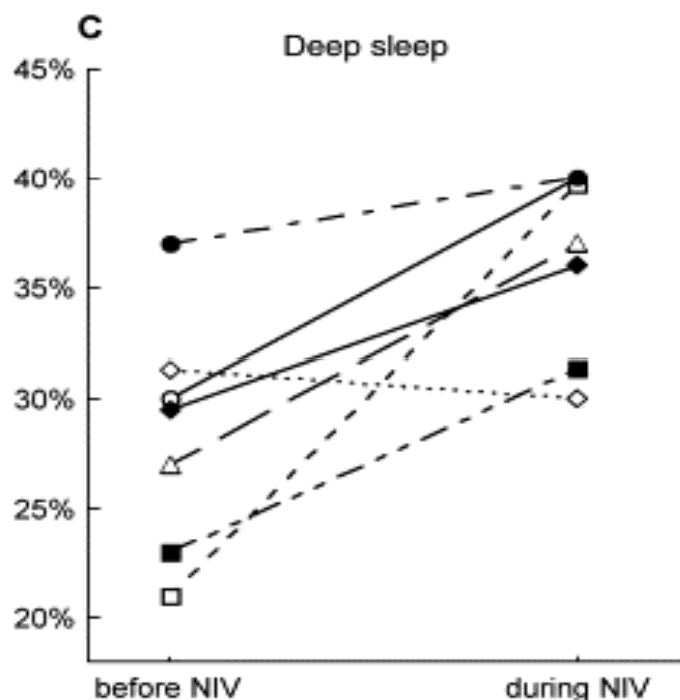
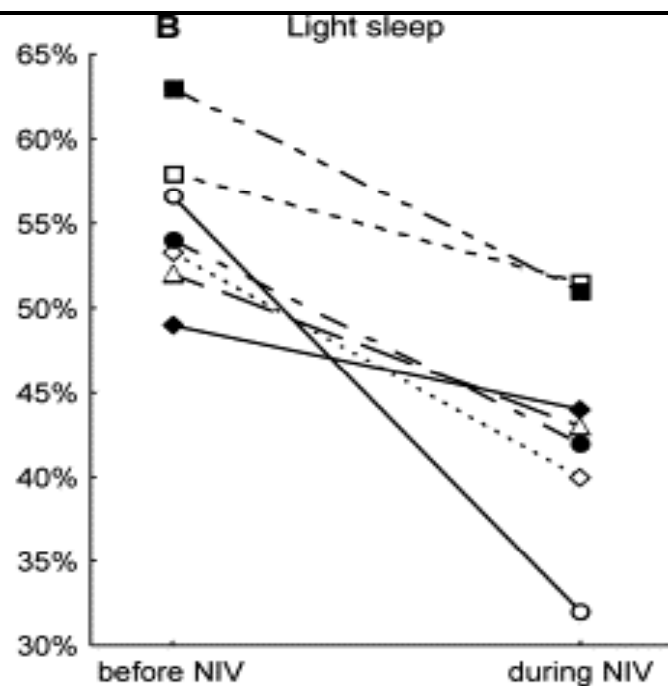
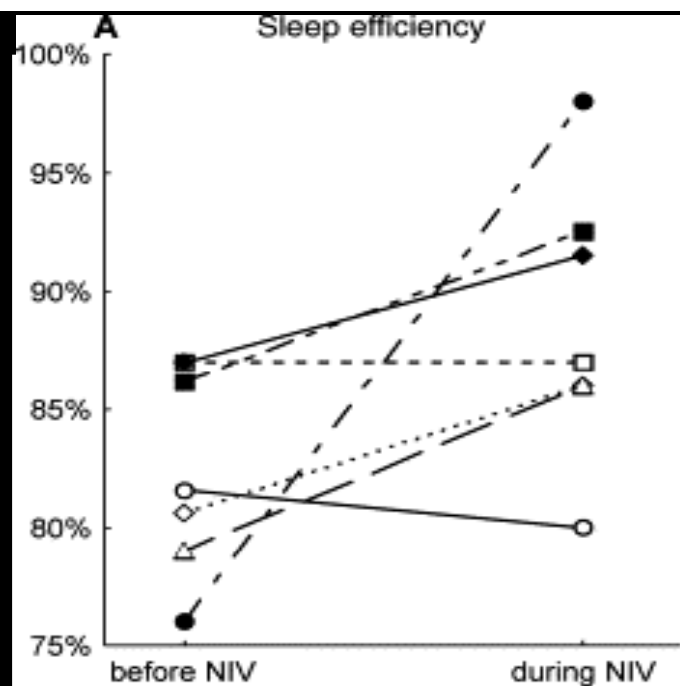
Central Apnea



Sleep-Exacerbated Restrictive Lung Disease



Kirk et al 2000



Mellies et al 2004

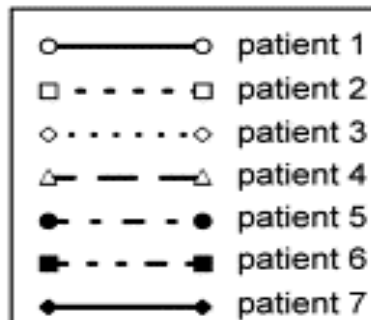
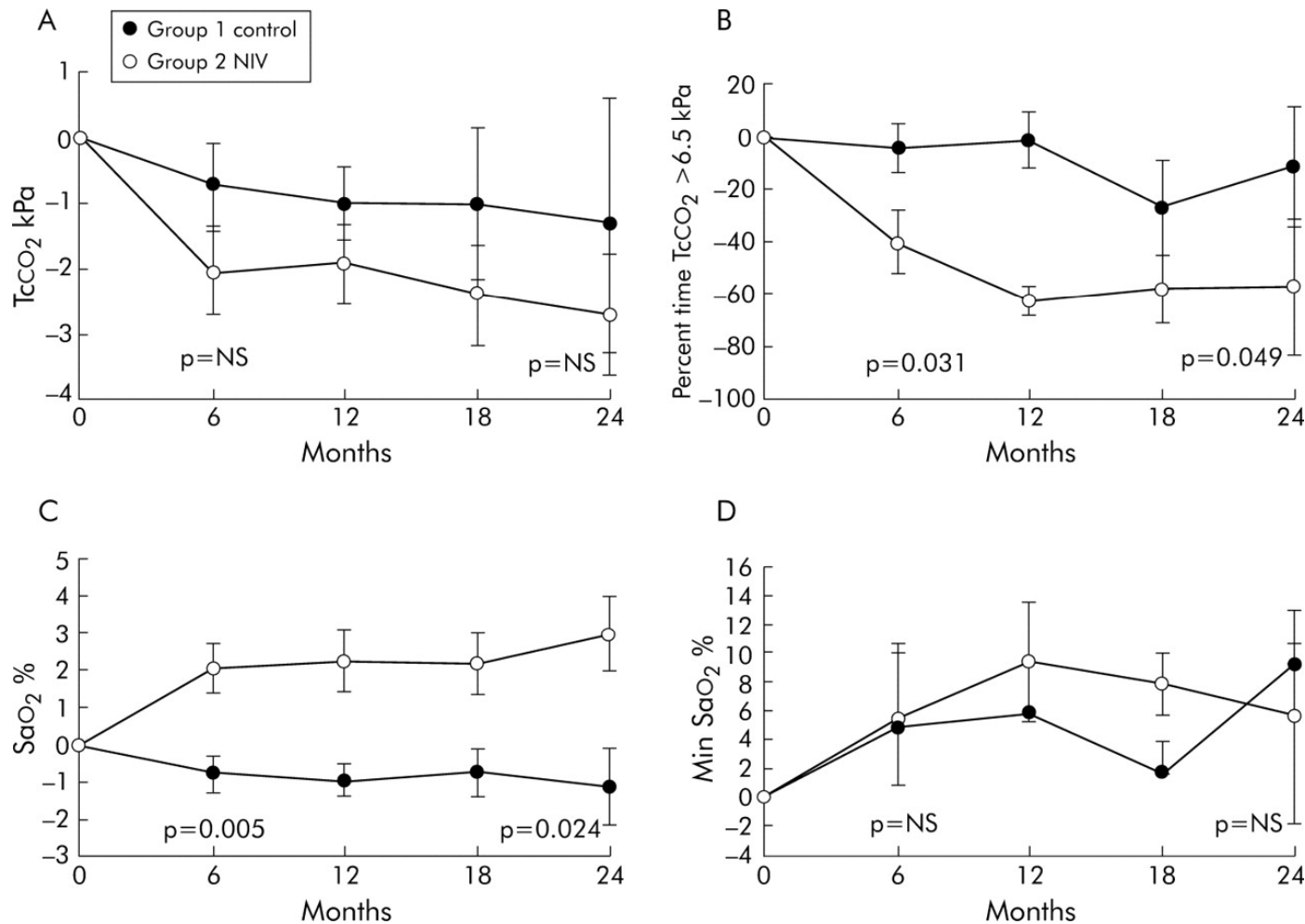


Figure 2 Difference between baseline values and those at 6, 12, 18 and 24 months in (A) peak nocturnal TcCO₂, (B) mean nocturnal time TcCO₂ >6.5 kPa, (C) mean nocturnal SaO₂, and (D) mean minimum nocturnal SaO₂; p values given at 6 and 24 months. Error bars represent SE.



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