

## **COPD: SLEEP DURING NON-INVASIVE VENTILATION**

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In COPD, non-invasive ventilation (NIV) is effective in the treatment of chronic respiratory failure concerning improvement of blood gases and other respiratory parameters. But there are only few studies which focus on sleep quality during NIV in COPD. In a RCT of Meecham Jones and coworkers (1995) NIV + oxygen improved total sleep time and sleep efficiency. But in a metaanalysis of Wijkstra et al (2003) this could not be confirmed. The analysed papers of Strumpf and coworkers (1991), Meecham Jones and coworkers (1995) und Gay and coworkers (1996) had, however, a very different patients`selection and ventilation mode and quality, which might be a reason for the negative results of this metaanalysis. A more recent study of McEvoy and coworkers (2009) compared oxygen therapy alone vs. NIV + oxygen. There was at least a significant increase of REM sleep during NIV, but sleep efficiency was not better than in the oxygen group. So, there are some controversial data concerning sleep during NIV in COPD, which has to be worked up and further investigated.