Erectile dysfunction (ED) is common among men with obstructive sleep apnea (OSA) with reports of prevalence varying from 30 – 50 percent. The mechanism is unknown. Since chronic hypoxia is known to cause peripheral neuropathies, it is logical to question whether ED in OSA might reflect peripheral neuropathy resulting from the intermittent nocturnal hypoxia concomitant with OSA. Two recent studies support this hypothesis.

1. Mayer et al.[1] compared nerve function (median nerve) in control subjects to patients with severe OSA (who had no daytime hypoxemia and no recognized cause of neuropathy), both before and during 30 minutes of induced ischemia. The OSA patients had peripheral nerve dysfunction in which severity was related partly to the level of nocturnal hypoxemia. Nasal CPAP treatment for 2 months reversed some of the abnormalities.

2. In OSA patients without daytime respiratory failure or neurological disease, Farfulla et al.[2] assessed ED and pudendal neuropathy using established methods of documenting pudendal neuropathies as the cause of impotence (including the bulbocavernosa reflex). The bulbocavernosa reflex was absent or prolonged in 68 percent of the sample, and there was a near perfect correspondence to the presence of ED. The nerve alterations correlated with severity of nocturnal hypoxemia.

Erectile dysfunction is common in OSA and appears related, at least in part, to nerve alterations which vary with the degree of nocturnal hypoxemia.

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