Palatal implants have been used to treat snoring and mild to moderate obstructive sleep apnea (OSA). Two previous controlled trials have published conflicting results regarding the effects of palatal implants on objective outcome measures, although they both could demonstrate superiority over placebo. The aim of the present study was to assess the effects of palatal implants in patients with mild to moderate sleep apnea in a randomised, placebo-controlled trial. Twenty-two patients with mild to moderate OSA (AHI 18 ± 5, BMI 28 ± 3, age 51 ± 13 years) due to palatal obstruction were enrolled in this randomised, double-blind, placebo-controlled trial. Respiratory parameters and sleep efficiency (evaluated by polysomnography), snoring (evaluated by the bed partner), and daytime sleepiness (evaluated by ESS) were assessed before and 90 days after surgery. One patient in each group did not show up for follow-up. The AHI, HI and LSAT showed statistically significant improvement in the treatment group (p< 0.05). Snoring as rated by bed partners also showed statistically significant improvement within the treatment group (p = 0.025). There was no statistical difference when comparing the means of the treatment group with the placebo group. There were no peri- or post-operative complications and no extrusions during the follow-up period. The study supports the idea that palatal implants...
lead to a reduction in respiratory events in patients with mild to moderate OSA, although a statistically
significant superiority of palatal implants over placebo could not be demonstrated in this trial.