Dokumenttyp: journal article
Autor(en) des Beitrags: Arzt, M; Schroll, S; Series, F; Lewis, K; Benjamin, A; Escourrou, P; Luigart, R; Kehl, V; Pfeifer, M
Titel des Beitrags: Auto-servoventilation in heart failure with sleep apnoea: a randomised controlled trial.
Abstract: We tested the hypotheses that in patients with congestive heart failure (CHF) and sleep disordered breathing (SDB) auto-servoventilation (ASV) improves cardiac function and quality of life. Between March 2007 and September 2009, patients with stable CHF (left ventricular ejection fraction (LVEF) = 20 events · h(-1)) were randomised to receive either ASV (BiPAP ASV (Philips Respironics, Murrysville, PA, USA), n=37) and optimal medical management, or optimal medical management alone (n=35). Outcomes were assessed at baseline and 12 weeks. The apnoea/hypopnoea index assessed with polysomnography scored in one core laboratory was significantly more reduced in the ASV group (-39 ± 16 versus -1 ± 13 events · h(-1); p<0.001) with an average use of 4.5 ± 3.0 h · day(-1). Both groups showed similar improvements of the primary end-point LVEF (+3.4 ± 5 versus +3.5 ± 6%; p=0.915) assessed with echocardiography. In the ASV group, reduction of N-terminal pro-brain natriuretic peptide (NT-proBNP) was significantly greater (-360 ± 569 versus +135 ± 625 ng · mL(-1); p=0.010). No differences were observed between the groups in subjective quality of life. In patients with CHF and SDB, ASV reduced NT-proBNP levels, but improvement of LVEF or quality of life was not greater than in the control group. The data support that such patients can be randomised in large-scale, long-term
trials of positive airway pressure therapy versus control to determine effects on cardiovascular outcome.