Abstract:
Both short and long self-reported sleep duration (SDSR) has been linked to increased mortality. Our analysis tested the hypothesis that long SDSR is paralleled by impaired objective sleep efficiency (SEPSG) measured by polysomnography (PSG) and that impaired SEPSG is a risk factor for death in patients with chronic heart failure (CHF). SDSR and SEPSG were assessed by standardized questionnaire and PSG in 188 consecutive CHF patients (age range, 63±10 year; left ventricular ejection fraction, 34±10%) admitted to the Sleep Center of the University Hospital Regensburg between 1/2002 and 12/2009. The mean follow-up period was 44±26 months. SEPSG in CHF patients from the highest quintile of SDSR (>=9h) was significantly lower compared with the middle quintile (7.25-8h; 71±15% vs 77%±11%; p=0.032) and similar to the lowest quintile (<=5.75h; 71±15% vs 71±16%, p=0.950). SEPSG is an independent predictor for death in the multivariable model after accounting for the significant confounders age, left ventricular ejection fraction, cause of CHF, and NYHA class (hazard ratio [HR] per 5% increase, 0.85; 95% confidence interval [CI], 0.77-0.93; p<0.001). Data indicate that subjective long sleepers with CHF have poor sleep efficiency. Objectively measured SEPSG strongly predicts mortality in CHF patients, underscoring the
importance of objective assessment of sleep.