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**SLEEP DURING AND AFTER CARDIOTHORACIC INTENSIVE CARE AND  
PSYCHOLOGICAL HEALTH DURING RECOVERY**

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## **A b s t r a c t**

**B a c k g r o u n d:** Intensive care patients experience poor sleep quality. Psychological distress and diminished health-related quality of life are also common among former ICU patients. Coronary artery bypass graft (CABG) surgery is a frequent reason for adults requiring treatment in ICU. The effect of on-pump vs off-pump surgery on sleep and recovery has not been reported.

**O b j e c t i v e:** To assess sleep quality of CABG patients during and after ICU, psychological wellbeing, HRQOL during recovery and whether on-pump vs off-pump surgery affects sleep and recovery.

**M e t h o d s:** Data were collected in ICU, on the hospital ward, and two months and six months after hospital discharge using validated self-report questionnaires.

**R e s u l t s:** The sample (n=101) was mean age 66.6±11.1 years, 79% male and had a median ICU stay of 2 (2-4) days, mean BMI 27.3±4.3 and 75% underwent on-pump surgery. Poor sleep was reported by 62% of patients at six months and by 12% of patients at all time points. Off-pump CABG patients had fewer PTSD symptoms (p=0.02) and better physical HRQOL (p=0.01). In multivariate analysis, prehospital insomnia (p=0.004), and physical (p<0.0005) and mental (p<0.0005) HRQOL were independently associated with sleep quality at six months. There was no association between on-pump vs off-pump CABG and sleep quality at six months.

**C o n c l u s i o n s:** Sleep quality of postoperative CABG patients was poor in ICU, the hospital ward and up to six months after discharge from hospital. Poor sleep quality at six months was associated with prehospital insomnia, and physical and mental HRQOL at six months, but not with on-pump vs off-pump surgery.

**K e y w o r d s:** sleep, psychological, quality of life, coronary artery bypass and thoracic