

Risk assessment of Sleep-disordered Breathing for psychiatric inpatients

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Objective: To evaluate the risk of Sleep-disordered Breathing (SDB) and the association between psychiatric diagnoses and SDB risk for hospitalized psychiatric patients in a medical center in southern Taiwan.

Methods: In the first week of Feb. 2018, all the psychiatric inpatients were evaluated by a screening instrument to assess the risk of SDB. The Chinese version of STOP-BANG questionnaire was adopted, which is a validated screening tool evaluating eight major risk factors for SDB (S snoring, T tiredness during daytime, O observed apnea, P high blood pressure, B body mass index (BMI), A age, N neck circumference and G gender). The total scores were classified as low-risk (scores 0~2), intermediate-risk (scores 3~4) or high-risk (scores 5~8). Demographic characteristics, psychiatric diagnoses, and the screening results were summarized and analyzed.

Results: Totally, 36 patients (18 males and 18 females) were enrolled in the assessment and completed STOP-BANG questionnaire. The psychiatric diagnoses included schizophrenia, bipolar disorder, depression, dementia, and others. Among these patients, 25 of them scored low-risk (scores 0~2), seven patients scored intermediate-risk (scores 3~4) and four patients scored high-risk (scores 5~8). The top three risk factors were Age (> 50 years old), Snoring and Gender (male). The means and Standard Deviations of continuous variables were total scores (mean=2.17; SD=1.464); age (mean= 53.83; SD=16.431); BMI (mean=24.006; SD=3.8554); neck circumference (mean=38.14; SD=4.613). The association between psychiatric diagnoses and the above continuous variables were tested by one-way ANOVA (Analysis of Variance) in SPSS. On analysis, psychiatric diagnoses were associated with Age ($P = 0.020$), BMI ($P = 0.047$) and STOP-BANG questionnaire total scores ($P = 0.034$) but not associated with Neck circumference ($P = 0.365$). Among these psychiatric diagnoses, patients with bipolar disorder were the most obese and patients with dementia had the highest risk of SDB.

Conclusion: The Chinese version of STOP-BANG questionnaire is useful for the assessment of SDB risk with psychiatric inpatients. Psychiatric diagnoses may be associated with the risk of SDB. Further evaluation and management should be done for high-risk patients.

中文題目：精神科住院病患之睡眠呼吸障礙風險評估

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