

Sleep Disordered Breathing

as a Risk Factor in Stroke



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Problem

•Stroke can lead to the development of sleep disordered breathing (SDB). The literature suggests that SDB may be a risk factor for stroke and may result in poorer stroke outcomes.

 Currently, stroke patients are not routinely screened for SDB prior to discharge for acute care.

Background

- The AHI or Apnea-Hypopnea Index is used to assess the severity of sleep apnea based on the number of complete cessations (apnea) and partial obstructions (hypopnea) of breathing per hour of sleep. These pauses must last at least 10 seconds and be associated with a decrease in blood oxygenation. AHI values are typically categorized as mild (5-15/hr), moderate (15-30/hr) and severe (>30/hr).
- The association between stroke and sleep apnea may be as strong as the association between smoking and stroke. Approximately 40-60% of people who have had a stroke are found to have sleep apnea.



Rehab nurses are in a position to provide education for patients regarding treatment for sleep apnea and about lifestyle changes.

Implications

Although only 6% of the patients in our sample had a known history of sleep apnea, screening indicated that 71% were positive for SDB.

Failure to identify these patients in the hospital setting may lead to untreated sleep apnea, which could result in poorer outcomes for stroke patients.

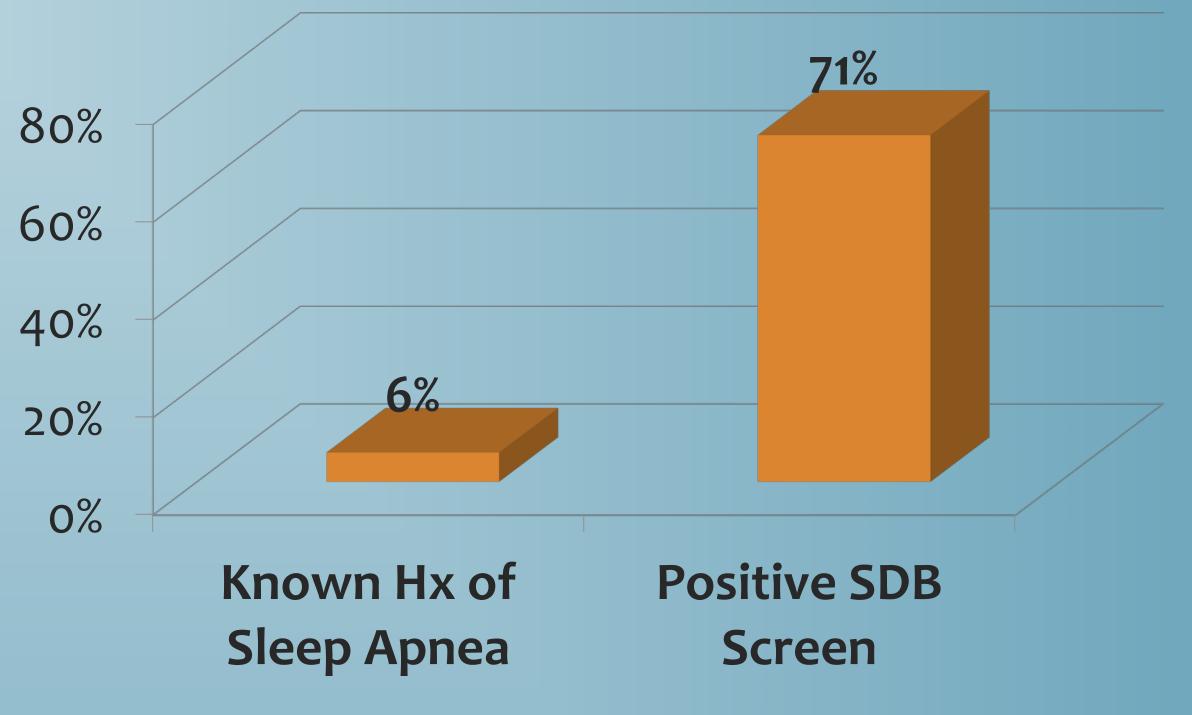
Based on our findings, screening of stroke patients for SDB in the acute rehabilitation setting is highly recommended to prevent untoward outcomes for our stroke patients.

Methodology

 All stroke patients admitted to the Acute Rehabilitation Unit between January 1, 2013 and December 31, 2013 were screened for SDB using the AHI by a sleep medicine specialist. Patients with an elevated AHI received referrals for outpatient follow up treatment.

Demographics and Results

Prevalence of Sleep Disordered Breathing



N=97, 50% Male, Age range 22-96, 66% age 65 and older

References

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