

Safely Managing Peri-operative Patients with Sleep Apnea

The Problem

Obstructive Sleep Apnea (OSA) increases the risk of peri-operative complications. However, screening patients for a pre-existing diagnosis of OSA or identification of patients who may be at risk for undiagnosed OSA is not standardized in the pre-operative period. This leaves a substantial number of peri-operative patients at risk for preventable complications related to OSA.

Aim/Goal

By implementing a pre-operative screening protocol to identify all surgical patients with known or at a high-risk for OSA, we aim to safely and appropriately manage these patients in the peri-operative setting.

The Team

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The Interventions

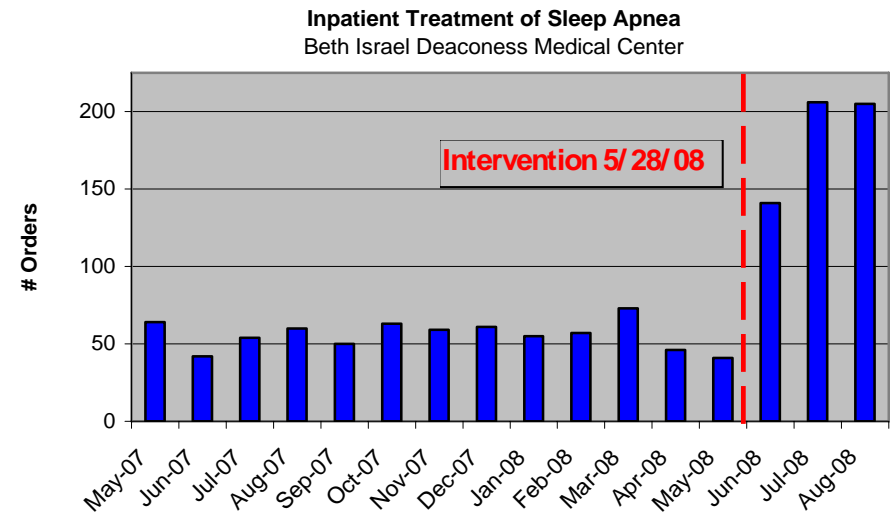
- A pre-operative electronic OSA screening tool including a “red alert” message indicating the patient’s risk level in the Peri-operative Information Management System (PIMS)
- A standardized Provider Order Entry (POE) order set for Continuous Positive Airway Pressure (CPAP) and Bi-level Positive Airway Pressure (BiPAP) implementation in patients requiring treatment
- An interdisciplinary approach to care based on patient events and the overall clinical picture
- A comprehensive education plan for everyone involved in peri-operative patient management
- Patient education material and a follow-up letter to Primary Care Providers (PCPs) for patients screened high-risk

Lessons Learned

Collaboration from all disciplines and continuous monitoring of the system of care are essential to the success of an OSA screening program. Additionally, despite our best efforts, and consistent with the outpatient experience, many patients are not compliant with CPAP treatment. Intensified monitoring strategies are needed for these patients to achieve risk reduction.

The Results to Date

The significant increase in orders of CPAP and BiPAP machines after initiation of the screening protocol on May 28, 2008 indicates that patients not diagnosed with Obstructive Sleep Apnea, but at high risk are being managed appropriately after surgery.



Next Steps

Once acceptable screening rates have been obtained, it will be important to focus our efforts on the following:

- Screening 100% of surgical patients for OSA risk levels
- Ensuring that patients deemed high-risk are receiving appropriate post-operative treatment for OSA
- Quantifying outcomes, i.e. reduction in OSA-related complications
- Expanding the screening and management protocol to other patient populations undergoing sedation for any procedures during their hospitalization and to outpatients requiring sedating medications
- Developing and implementing targeted procedure- or patient-specific screening tools

