

ADMINISTRATIVE POLICY AND PROCEDURE MANUAL

Perioperative Management of Patients with Obstructive Sleep Apnea

SECTION: NO. / N° : ADM ___ ___

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1. POLICY

Obstructive sleep apnea (OSA) is associated with hypoxemia, hypercarbia, polycythemia, cor pulmonale, and hypertension. Patients with OSA frequently present an increased risk of difficult intubation and an increased sensitivity to sedative and analgesic medications. Postoperatively patients with OSA are at risk for postoperative apnea, desaturation, and cardiac dysrhythmias. Perioperative care including premedication, anesthetic management, postoperative monitoring, and analgesia must be modified to address the unique problems presented by OSA.

2. DEFINITION

For the purposes of this policy

OSA will be defined as:

- 2.1. Any respiratory illness requiring the use of nasal CPAP or BiPAP in the community
- 2.2. Previous diagnosis of OSA.
- 2.3. Sleep study documenting an apnea/hypopnea index of 5 or more

A monitored environment will be defined as:

- 2.4 A facility capable of providing continuous measurement of pulse and oxygen saturation.

3. PROCEDURE

Preoperative evaluation

- 3.1 Preoperative screening evaluations will seek the presence of OSA.
- 3.2 Patients with OSA must be seen in consultation by an anesthesiologist preoperatively.
- 3.3 Sleep study reports should be obtained and appended to the patient record.

Day of Surgery

- 3.4 Patients treated with nasal CPAP or BiPAP will bring their machines to hospital on the day of surgery.
- 3.5 Sedative premedication is to be avoided.
- 3.6 Short-acting anesthetic drugs should be considered.

Post-Anesthesia or Monitored Care Unit(s)

- 3.7 All patients with OSA will be observed in a monitored environment for a minimum of 4 hours postoperatively.
- 3.8 All patients with CPAP appliances will wear their devices while resting/sleeping.
- 3.9 Patients may be discharged to community after 4 hours observation if:
 - 3.9.1 The patient meets discharge criteria
 - 3.9.2 The patient possesses and has been instructed to use their CPAP appliance.
 - 3.9.3 The patient experienced no episodes where oxygen saturation was less than 90%
 - 3.9.4 The patient experienced no apnea or airway obstruction.
 - 3.9.5 The patient is assessed by Anesthesia
 - 3.9.6 The patient has adequate analgesia with non-opioids or weak opioid analgesia (60 mg codeine po Q4H or equivalent)
- 3.10 Patients may be discharged to the ward after 4 hours observation if:
 - 3.10.1 The patient meets PACU discharge criteria
 - 3.10.2 The patient possesses and has been instructed to use their CPAP appliance.
 - 3.10.3 The patient experienced no episodes where oxygen saturation was less than 90%
 - 3.10.4 The patient experienced no apnea or airway obstruction
 - 3.10.5 The patient is assessed by Anesthesia
 - 3.10.6 The patient has adequate analgesia with parenteral opioids or neuraxial analgesia.
 - 3.10.7 Written orders for continued use of CPAP during sleep are present on the patient's chart.
 - 3.10.8 The patient's vital signs are monitored according to relevant surgical or Acute Pain Service orders.
- 3.11 Patients must remain in a monitored environment for the first postoperative night if:
 - 3.11.1 The patient has known, severe, OSA defined by an apnea hypopnea index of greater than 50.
 - 3.11.2 The patient is unwilling or unable to wear their CPAP appliance.
 - 3.11.3 The patient has undergone a procedure associated with postoperative airway edema and obstruction (uvulopalatopharyngoplasty, radical neck dissection, carotid endarterectomy, etc)
 - 3.11.4 The patient experiences apnea or desaturation during the 4 hour observation period
 - 3.11.5 The patient has inadequate analgesia with increasing and unpredictable use of parenteral opioids.
- 3.12 Patients treated with CPAP staying in hospital will be seen in consultation by a Respiratory Therapist to determine device settings and compatibility with hospital systems.
- 3.13 Patients observed overnight must be assessed by a physician prior to discharge and have appropriate orders for monitoring and CPAP therapy placed on their chart.
- 3.14 Patients requiring strong enteral, IM, SC, IV, or neuraxial opioids for postoperative analgesia are unsuitable for ambulatory surgery and should be performed at an inpatient facility.

4. RELATED POLICIES AND / OR LEGISLATION: N/A