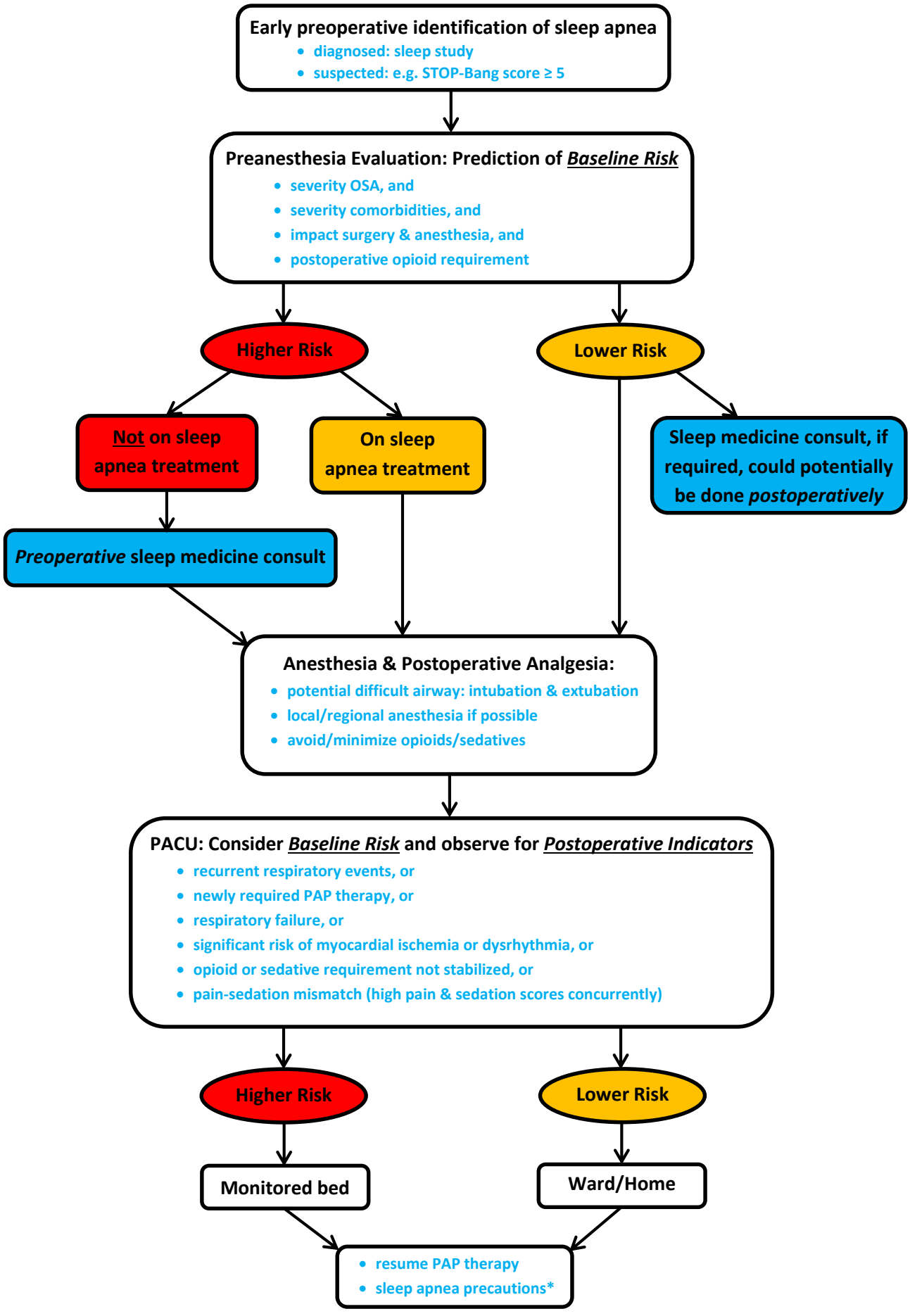
Perioperative Management of Sleep Apnea: Summary

Vancouver Acute Department of Anesthesia and Perioperative Care - February 2014



*Postoperative Sleep Apnea Precautions

1. Monitored bed indicated while patient remains at increased postoperative risk of complications from sleep apnea

- **i.e. continuous oximetry monitoring & possibility of early nursing intervention**

  (+ cardiac monitoring if at significant ↑ risk of myocardial ischemia/dysrhythmia)

  - e.g. PACU, SDU, other Critical Care Unit, or remote oximetry by telemetry on surgical ward

- **indications** for monitored bed include:

  a. high ***baseline risk*** of postoperative complications (severity OSA, severity comorbidities, impact surgery/anesthesia, & postoperative opioid requirement),

  or

  b. any ***postoperative indicators*** of risk

  i. recurrent respiratory events, or
  ii. newly required PAP therapy, or
  iii. respiratory failure, or
  iv. significantly ↑ risk of myocardial ischemia or dysrhythmia, or
  v. opioid or sedative requirement not stabilized, or
  vi. pain-sedation mismatch (high pain & sedation scores concurrently)

- **physician to clear discharge from monitored bed** to a routine unit after verifying that:
  - no respiratory interventions were required overnight while resting/sleeping in an unstimulating environment, and
  - no other postoperative indicators present for ongoing observation in a monitored bed

2. Respirology consultation indicated if:

- PAP therapy newly required postoperatively
- hypoxemic or hypercarbic respiratory failure

3. Caution with administration of opioids, benzodiazepines, antihistamines, phenothiazines & other sedatives

- hypersomnolence associated with airway compromise in patients with sleep apnea
- avoid/minimize opioids/sedatives if possible (avoid basal IV/SQ opioid infusions; ? avoid neuraxial bolus of long acting opioid)
- opioid sparing techniques include use of NSAIDS &/or continuous infusion of opioid-free regional anesthesia (epidural or continuous peripheral nerve block)
- if opioids required, consider ↓ usual starting dose by up to 50% in opioid naïve patients
- PCA for patients at ↑ postoperative risk of complications from sleep apnea should be managed by the Perioperative Pain Service

4. Caution with O_2 supplementation

- may prolong apneas, exacerbate hypercapnea & hinder detection of respiratory deterioration by SpO_2
- O_2 supplementation ideally discontinued when patient able to maintain baseline SpO_2 on room air

5. Avoid supine position if possible

- semi-sitting or lateral position preferred

6. Resume PAP therapy

- if established on CPAP or BiPAP, ensure device applied when resting in bed
- a monitored bed is required if PAP therapy newly required postoperatively

7. Diagnostic follow-up

- patients with suspected sleep apnea should be referred for a sleep medicine assessment

8. Discharge instructions

- all patients with known/suspected sleep apnea should cautioned about the risk, and additive risk, of taking opioids, sedatives and alcohol

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