Perioperative Management of OSA in Adults



Primary Care

Screening 10:

Snoring Cognitive
Unrefreshing dysfuntion

Apnoeas

Tiredness/ Fatique

Sleep

Waking Headache

Choking during sleep

Nocturia Insomnia

≥2 of the above:

Suspect OSA. Use STOP-BANG questionnaire to assess risk of patient having OSA. Use Epworth

<u>Sleepiness Score</u> to assess sleepiness.

Priority factors for rapid assessment:

- Vocational driving or vigilance-critical job
- Unstable cardiovascular disease
- Pregnancy
- Preoperative assessment for major surgery

STOP-BANG

Screening questionnaire +/- Epworth Sleepiness scale:

Snoring

Tiredness

(or Epworth score ≥12)

Observed apnoeas

Pressure:

Hypertension

BMI >35 kg.m⁻²

Age >50

Neck Circumference

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> 40cm

Gender: Male

Secondary Care 1

Assessment:

Home-testing devices for diagnosing obstructive sleep apnoea hypopnoea syndrome

Management:

Emphasis on lifestyle advice and support for smoking cessation, alcohol reduction, weight loss and exercise

Mild:

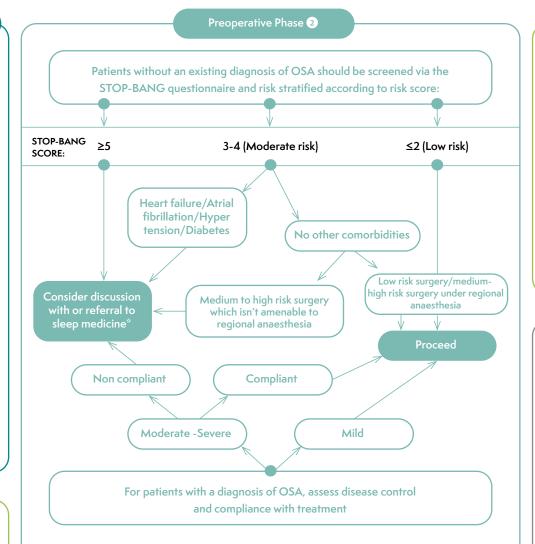
Mandibular advancement device

Continuous Positive Airway Pressure (CPAP) if symptoms are affecting quality of life in the presence of priority factors

Mod-Severe:

CPAP

Follow up of compliance, disease control and quality of life



*Develop streamlined pathways between perioperative services and sleep medicine
Establishing home oximetry testing from perioperative clinic can improve
screening accuracy and pathway efficiency

Do not delay urgent surgery for investigation of OSA. If high risk, manage as if known OSA and refer for assessment post operatively.

Aim for 4-6 weeks of CPAP therapy prior to planned surgery

Examples of risk stratification tools: SOBA OSA algorithm ${f 3}$ or ASA OSA tool ${f 4}$

OSA patients should not be denied access to day surgery based on diagnosis alone.

Protocols should maximise opportunity for OSA patients to be managed safely via day case

pathways if co-morbidities are optimised and surgery is amenable to multimodal opioid-sparing analgesia/regional anaesthesia 3

Support patients to engage in shared decision making, lifestyle modification and preparation for surgery to reduce OSA associated risk **6**

Empower patient to bring in their own CPAP machine and use it post operatively (May require adapter to use with oxygen in immediate post operative period)

Intraoperative Care & Surgery

8x increase in difficult airway incidence

Increased opioid sensitivity 2

Regional/ local techniques are gold standard 4

Caution with Interscalene Blocks due to risk of phrenic nerve palsy

If sedation, use capnography and consider HFNO or CPAP

Limited opioid strategy

Full NMB reversal prior to awake extubation (Consider Sugammadex)

Postoperative Care

Recover in facility where CPAP can be safely administered

Consider HDU or enhanced care for increased monitoring requirement or those at high risk according to risk stratification **o**

Only discharge to unmonitored environment when no longer at risk of respiratory depression 4

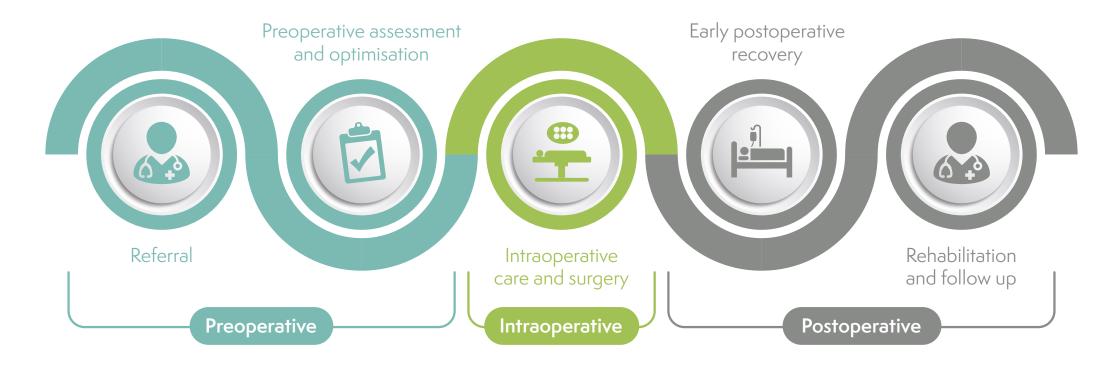
Follow up existing and suspected OSA by sleep services in community

Links

- 1 NICE OSA guidelines
- 2 Pre-op Association OSA guidelines
- 3 SOBA OSA guide
- 4 ASA guidelines on management of patients with OSA
- 5 Guidelines for day case surgery
- 6 FICM/CPOC enhanced care quidelines
- Society of Anesthesia and Sleep Medicine guideline

Perioperative Management of OSA in Adults





Key Principles

- Patient centered care
- · Shared decision making
- Joined up team working
- Technology that works

Core Competencies

- Recognise & Optimise long term conditions, frailty, anaemia and diabetes
- **Support Patients** to stop smoking, be active and exercise more, reduce alcohol, improve nutrition, prepare mentally and manage their weight
- Assess Risk with anticipation and prevention of complications
- Plan the perioperative period and discharge
- Rehabilitate to community