

Suspected OHS

Investigations and treatment at a sleep service

Prioritise of people with suspected OHS for rapid assessment by sleep centre:

- severe hypercapnia PaCO₂ over 7 kPa when awake
- hypoxaemia (arterial oxygen saturation less than 94% on air)
- acute ventilatory failure
- a vocational driving job
- a job for which vigilance is critical for safety
- pregnancy
- unstable cardiovascular disease
- undergoing pre-operative assessment for major surgery
- non-arteritic anterior ischaemic optic neuropathy

Diagnosing OHS
Consider serum venous bicarbonate as a preliminary test if pre-test probability of OHS is low
Measure arterial blood gas when awake to diagnose OHS and assess extent of chronic ventilatory failure

Discuss appropriate lifestyle changes tailored to the person's needs

No acute ventilatory failure

Acute ventilatory failure

Diagnosing OSAHS and nocturnal hypoventilation
Offer home or hospital respiratory polygraphy to determine presence of OSAHS
Consider transcutaneous CO₂ monitoring with respiratory polygraphy

Severe OSAHS excluded

Severe OSAHS

Consider NIV

Offer CPAP
Consider adding heated humidification for upper airway side effects and CPAP-induced rhinitis

Monitor: switch to NIV if persistent symptoms, raised AHI or excess hypercapnia or poor CPAP tolerance

Offer non-invasive ventilation (NIV)

Hypercapnia resolves

Persistence of hypercapnia

Consider stopping NIV and monitor response

Consider continuing and further optimising NIV

Remains stable

Decompensates

Consider respiratory polygraphy to determine presence of OSAHS

No OSAHS

OSAHS present: consider trial of CPAP

Monitor and optimise therapy with CPAP and NIV. Offer:

- Face-to-face, video or telephone consultations with telemonitoring (if available)
- Access to sleep clinic service for CPAP users for advice, support and equipment
- Education and supportive interventions by trained specialist to improve adherence

Consider supplemental oxygen therapy if remain hypoxaemic despite optimal control of nocturnal hypoventilation and AHI on CPAP or non-invasive ventilation

For people with suspected or confirmed rhinitis see OSAHS rhinitis recommendations 1.16.1 to 1.16.4