

THE USE OF CONTINUOUS POSITIVE AIRWAY PRESSURE (CPAP) IN ADULTS WITH OBSTRUCTIVE SLEEP APNOEA/HYPOPNOEA SYNDROME (OSAHS) AT WYTHENSHAWE SLEEP SERVICE: A CLINICAL AUDIT

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1. Introduction

Obstructive Sleep Apnoea/Hypopnoea Syndrome (OSAHS) is a chronic condition pertaining to episodes of airway obstruction during sleep causing a disruption to breathing. The management of OSAHS is dependent upon its severity with moderate or severe cases requiring Continuous Positive Airway Pressure (CPAP). CPAP is only recommended by NICE in mild cases if lifestyle advice has been deemed inappropriate or unsuccessful. This audit aimed to explore how compliant the Regional Sleep Service at Wythenshawe Hospital is with the NICE guidance for the management of OSAHS. NICE guidance helps patients to receive care which is based on the best available evidence. It ensures patients are cared for in a consistent, evidence-based manner and helps to eliminate healthcare inequalities across the country. Ensuring NICE guidance is implemented in day-to-day clinical practice is therefore of major importance.

2. Method

New patients referred to the regional sleep service for assessment of OSAHS from 1st October 2020 to 3rd November 2020 were reviewed. Patients' clinic letters and sleep study results were analysed to ascertain the severity of their sleep apnoea and the management which they had. Sleep apnoea severity was measured via the Apnoea Hypopnoea Index (AHI).

Severity of OSAHS	Apnoea Hypopnoea Index (AHI)
No OSAHS	<5
Mild OSAHS	5-14
Moderate OSAHS	15-30
Severe OSAHS	>30

Figure 1 - Measuring Severity of OSAHS via Apnoea Hypopnoea Index (AHI)

The following standards from NICE Guidelines (NG10098) were utilised in this audit regarding the use of CPAP in OSAHS:

- For adults with severe OSAHS:
 - CPAP is recommended
- For adults with moderate OSAHS:
 - CPAP is recommended
 - If unable to tolerate / decline CPAP, then consider a customised mandibular advancement splint as alternative as long as aged 18 or over and have suitable dentition
- For adults with mild OSAHS who have symptoms that affect quality of life and usual daytime activities, offer CPAP:
 - if lifestyle advice alone has been unsuccessful or is considered inappropriate
- For adults with mild OSAHS and have no symptoms, treatment is not usually needed and changes to lifestyle and sleep habits are recommended to prevent worsening of OSAHS.

3. Results & Discussion

The results showed that 93% of cases were managed by the service in a manner compliant with NG10098. In a few cases CPAP was offered in mild OSAHS prior to lifestyle changes being advised first. In other cases, patients had multiple co-morbidities which were not accounted for in NG 10098. To name a few, CPAP was offered in mild OSAHS cases for those suffering from sleep paralysis, catathrenia, previous stroke and excess daytime sleepiness. All moderate and severe OSAHS cases were offered CPAP. NICE guidance is only a guide and clinical discretion is required during particularly complex cases where there are many factors at play. A re-audit is recommended following the publication of the new NICE guidance in August 2021 to ensure standards are being maintained.

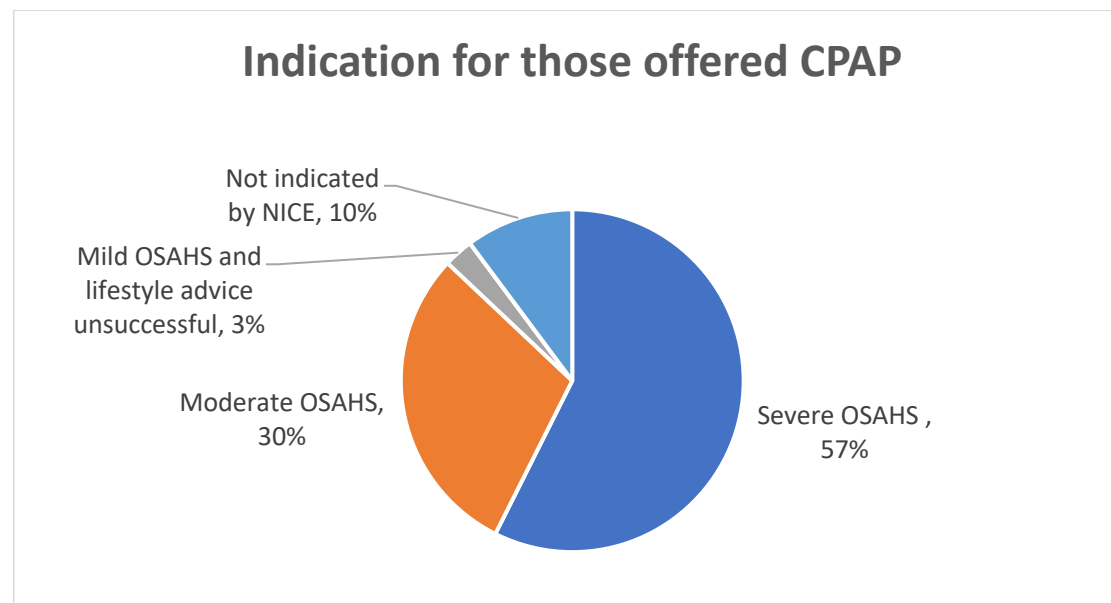


Figure 2 - Indications for those offered CPAP

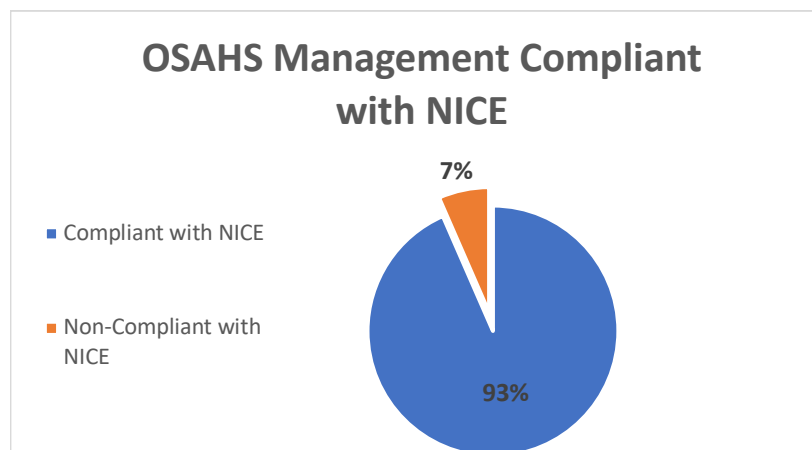


Figure 3 - Overall Management of OSAHS compliant with NICE Guidelines

4. References

- NG10098 [Internet]. NICE.org.uk. 2021 [cited 16 May 2021]. Available from: <https://www.nice.org.uk/guidance/gidng10098/documents/draft-guideline>
- 1 Guidance | Continuous positive airway pressure for the treatment of obstructive sleep apnoea/hypopnoea syndrome | Guidance | NICE [Internet]. NICE.org.uk. 2021 [cited 16 May 2021]. Available from: <https://www.nice.org.uk/guidance/ta139/chapter/1-Guidance>
- Benefits of implementing NICE guidance [Internet]. NICE. 2021 [cited 16 May 2021]. Available from: <https://www.nice.org.uk/about/what-we-do/into-practice/benefits-of-implementing-nice-guidance>