Clinical Practice Guideline for Diagnostic Testing for Adult Obstructive Sleep Apnea: An American Academy of Sleep Medicine Clinical Practice Guideline

ADAPTED FROM

Good Practice Statements
Diagnostic testing for OSA should be performed in conjunction with a comprehensive sleep evaluation and adequate follow-up.

Polysomnography is the standard diagnostic test for the diagnosis of OSA in adult patients in whom there is a concern for OSA based on a comprehensive sleep evaluation.
RECOMMENDATIONS FOR THE DIAGNOSIS OF OSA IN ADULTS

1. We recommend that clinical tools, questionnaires or prediction algorithms not be used to diagnose OSA in adults, in the absence of PSG or HSAT. (Strong)

2. We recommend that PSG, or HSAT with a technically adequate device, be used for the diagnosis of OSA in uncomplicated adult patients presenting with signs and symptoms that indicate an increased risk of moderate to severe OSA. (Strong)

3. We recommend that if a single HSAT is negative, inconclusive or technically inadequate, PSG be performed for the diagnosis of OSA. (Strong)

The following remarks are based on specifications used by studies that support these recommendation statements: An uncomplicated patient is defined by the absence of:

1. Conditions that place the patient at increased risk of non-obstructive sleep-disordered breathing (e.g., central sleep apnea, hypoventilation and sleep related hypoxemia). Examples of these conditions include significant cardiopulmonary disease, potential respiratory muscle weakness due to neuromuscular conditions, history of stroke and chronic opiate medication use.

2. Concern for significant non-respiratory sleep disorder(s) that require evaluation (e.g., disorders of central hypersomnolence, parasomnias, sleep related movement disorders) or interfere with accuracy of HSAT (e.g., severe insomnia).

3. Environmental or personal factors that preclude the adequate acquisition and interpretation of data from HSAT.

An increased risk of moderate to severe OSA is indicated by the presence of excessive daytime sleepiness and at least two of the following three criteria: habitual loud snoring, witnessed apnea or gasping or choking, or diagnosed hypertension.

HSAT is to be administered by an accredited sleep center under the supervision of a board-certified sleep medicine physician, or a board-eligible sleep medicine provider.

A single HSAT recording is conducted over at least one night.

A technically adequate HSAT device incorporates a minimum of the following sensors: nasal pressure, chest and abdominal respiratory inductance plethysmography, and oximetry; or else PAT with oximetry and actigraphy.

For additional information regarding HSAT sensor requirements, refer to The AASM Manual for the Scoring of Sleep and Associated Events.

A technically adequate diagnostic test includes a minimum of 4 hours of technically adequate oximetry and flow data.

4. We recommend that PSG, rather than HSAT, be used for the diagnosis of OSA in patients with significant cardiorespiratory disease, potential respiratory muscle weakness due to neuromuscular condition, awake hypoventilation or suspicion of sleep related hypoventilation, chronic opioid medication use, history of stroke or severe insomnia. (Strong)

5. We suggest that, if clinically appropriate, a split-night diagnostic protocol, rather than a full-night diagnostic protocol for PSG be used for the diagnosis of OSA. (Weak)

Clinically appropriate is defined as the absence of conditions identified by the clinician that are likely to interfere with successful diagnosis and treatment using a split-night protocol.

This recommendation is based on a split-night protocol that initiates CPAP titration only when the following criteria are met: (1) a moderate to severe degree of OSA is observed during a minimum of 2 hours of recording time on the diagnostic PSG, AND (2) at least 3 hours are available for CPAP titration.

6. We suggest that when the initial PSG is negative, and there is still clinical suspicion for OSA, a second PSG be considered for the diagnosis of OSA. (Weak)