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## LUNG ALERT .....

### Ambulatory continuous positive airway pressure without polysomnography in patients with a high probability of obstructive sleep apnoea

▲ Mulgrew AT, Fox N, Ayas NT, et al. Diagnosis and initial management of obstructive sleep apnea without polysomnography. A randomized validation study. *Ann Int Med* 2007;**146**:157–6.

 obstructive sleep apnoea (OSA) is a common condition, diagnosed by polysomnography. However, polysomnography is costly and its availability often limited, leading to a delay in diagnosis and initiation of treatment in OSA.

This randomised, controlled study compared the use of polysomnography for the diagnosis of OSA with the use of ambulatory continuous positive airway pressure (CPAP) titration as treatment initiation in a group of patients with a high probability of moderate to severe OSA. Sixty-eight patients with a high probability of OSA were randomised to either polysomnography or ambulatory CPAP. High probability was determined by the Epworth Sleepiness Score (ESS), Sleep Apnoea Clinical Score and overnight home oximetry. The primary endpoint measure was Apnoea Hypopnoea Index (AHI) after 3 months on CPAP treatment. The secondary endpoint measures were ESS, Sleep Apnoea Quality of Life Index (SAQLI) questionnaire and compliance with CPAP.

There was no significant difference in AHI between the two groups at 3 months. With the exception of one patient in the ambulatory CPAP group (subsequently diagnosed with Cheyne-Stokes respiration on polysomnography), all patients had improvements in AHI, ESS and SAQLI. Compliance with CPAP in the ambulatory CPAP group was better, perhaps due to lower starting CPAP, earlier onset of treatment and more frequent clinic attendances.

Ambulatory CPAP may be a practical alternative in this high-risk patient group and reduce the need for polysomnography. Information regarding the cost-benefit of this approach would be helpful.

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