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# SLEEP APNEA TESTING IN CONSECUTIVE OLDER FAMILY MEDICINE PATIENTS: SYMPTOMS AND HEALTH STATUS TWO YEARS LATER.

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**Introduction:**
Obstructive sleep apnea (OSA) common in older family medicine patients, yet it is difficult to identify which patients to refer for sleep apnea testing. We took the approach of offering all older patients a sleep evaluation, including overnight polysomnography (PSG), regardless of sleep complaints or signs of OSA. We followed their progress for two years in order to observe changes in symptom profiles and in health markers among those who adhere to treatment and those who refuse or discontinue treatment.

**Materials and methods:**
Consecutive older family medicine patients (n=178, M, age = 56) underwent in-laboratory polysomnography (PSG) and completed the Sleep Symptom Checklist (SSC). Health status was obtained through chart review. Those receiving a diagnosis of OSA were followed for treatment according to usual medical practice, primarily positive airway pressure (PAP) therapy. After two years, we re-contacted participants to enquire about treatment, adherence and health status. We compared OSA symptom profiles and presence of hypertension, hyperlipidemia, and diabetes at initial testing and after 2 years of usual medical care.

**Results:**
At 2 years post diagnosis, we were able to obtain follow-up data for 84 participants. All but 4 had received a diagnosis of OSA. Women were well represented in this sample, 61%. After 2 years, 36% of patients were continuing OSA treatment, primarily positive airway pressure (PAP).
Group comparisons show that those who persisted with PAP treatment had worse OSA scores as measured by PSG at initial testing, as well as more severe symptoms than those who refused treatment, including worse insomnia and sleep disorder symptoms. After 2 years, there was improvement in symptom severity on all SSC subscales. Interaction effects show that the improvements were largely in the adherent group. For the sleep disorder symptoms, there was a significant interaction effect, whereby adherent participants improved significantly compared to those who refused/discontinued treatment; these participants showed no significant improvement in symptom severity.
On health measures, the adherent group showed a small increased frequency of both hypertension and diabetes at initial testing compared to the treatment refusers/drop-outs. These health status measures did not change significantly for either group after 2 years.

**Conclusions:**
This older family medicine sample was not typical of a sleep clinic population since they were all offered sleep testing regardless of suspected OSA. The most notable results include 1) a high presence of OSA, 2) a high proportion of women volunteering for testing, 3) adherence to treatment was associated with improvement of insomnia and sleep disorder symptoms, 4) the presence of metabolic syndrome (hypertension, hyperlipidemia, diabetes) remained stable after two years, regardless of treatment adherence. In this relatively healthy sample, the benefit of OSA treatment regarding health outcome may require longer than two years to be evident.