

Sleep disordered breathing in seropositive population

Dr Sarang Patil, MD, FCCP

Assistant Professor,

Department of Pulmonary, Critical Carte and Sleep Medicine, Maharashtra university of health sciences (MUHS), India

Introduction

Seropositive patients are especially reluctant in visiting the healthcare facility and disclose the disease due to the social stigma. These patients are at a high risk of acquiring communicable diseases due impaired immunity. However non-communicable disorders like sleep disordered breathing are becoming increasing common due to sedentary lifestyle. We aim to study the sleep in seropositive patients on anti-retroviral therapy.

Aims and objectives:

- 1. To study the sleep patterns in seropositive patients
- 2. To study the overall sleep architecture in seropositive patients

Material and methods

Sample size: 50

Inclusion criteria:

- 1. Patients aged 18 years and above
- 2.Patients with seropositive status and on anti-retroviral therapy (ART)
- 3. Patients on regular follow-up
- 4.Patients with BMI more than 25kg/m2

Exclusion criteria:

- 1.Patients with tuberculosis and on anti-tubercular therapy
- 2. Patients long term oxygen therapy (LTOT)
- 3. Patients with recent history of myocardial infarction in past 3 months
- 4. Patients with history of cardiovascular accident and unable to follow commands
- 5. Patients unable to consent

Methodology:

Patients fulfilling the inclusion criteria were included in the study. ESS score was calculated in the study subjects. Those with ESS score more than 12 were advised polysomnography.

Results

- 1.Our study was male pre-dominated with 40 males and 10 females
- 2.Most common age group in our study was 48±5 with p≤0.01
- 3.Most common BMI in our study subjects was 25±4 kg/m2 with p≤0.09
- 4.10 patients had ESS score of 12 and above and advised polysomnography
- 5.5 patients were diagnosed with mild OSA and were advised lifestyle modification
- 6.2 patients were diagnosed with moderate OSA and were advised CPAP titration and lifestyle modification
- 7.1 patient was diagnosed with severe OSA and was advised CPAP therapy, lifestyle modification and pulmonary rehabilitation
- 8.2 patients lost to follow-up during the study period

Conclusions

Sleep breathing disorders are at a rising rate in the patients with seropositive status. These are most commonly missed during the routine follow-ups and also there is limited literature available. Further studies are required in this regards.

Clinical implications:

Seropositive patients should also be screened for sleep breathing disorders during follow-ups.

References

1. Reid S, Dwyer J. Insomnia in HIV infection: A systematic review of prevalence, correlates, and management. *Psychosom Med.* 2005;67:260–269. [PubMed] [Google Scholar]

2. Phillips KD, Skelton WD. Effects of individualized acupuncture on sleep quality in HIV disease. *J Assoc Nurses AIDS Care*. 2001;12:27–39. [PubMed] [Google Scholar]

3. Rubinstein ML, Selwyn PA. High prevalence of insomnia in an outpatient population with HIV infection. *J Acquir Immune Defic Syndr*. 1998;19:260–266. [PubMed] [Google Scholar]

4. Hand GA, Phillips KD, Sowell RL, Rojas M, Becker J. Prevalence of poor sleep quality in a HIV+ population of Americans. *J S C Med Assoc*. 2003;99:201–205. [Google Scholar]

5. Cohen FL, Ferrans CE, Vizgirda V, Kunkle V, Cloninger L. Sleep in men and women infected with human immunodeficiency virus. *Holist Nurs Pract*. 1996;10:33–43. [PubMed] [Google Scholar]

6. Patil, S. (2020). BIPAP VS CPAP IN TREATMENT OF OSAS. *Chest*, *158*(4), A2408–A2409. https://doi.org/10.1016/j.chest.2020.09.008

7. Patil, S., 2020. SLEEP PATTERNS IN OBESE COPD PATIENTS WITH DIABETES. Chest 157, A429. DOI: https://doi.org/10.1016/j.chest.2020.05.482

8. PATIL, S. (2022). HIGH-RESOLUTION PULSE OXIMETRY (HRPO): AN ULTRA COST SAVING METHOD OF DIAGNOSING OSA. *Chest*, *162*(4), A1493. https://doi.org/10.1016/j.chest.2021.05.462

10. PATIL, S. (2022). HOME OXYGENATION IN POST-COVID-19 ERA. *Chest*, *161*(6), A432. https://doi.org/10.1016/j.chest.2021.12.462

10. PATIL, S., 2021. TREATMENT EMERGENT CENTRAL SLEEP APNEA IN PATIENTS TREATED WITH CPAP AND BIPAP FOR OSA. Chest, ISSN: 0012-3692, Vol: 160, Issue: 4, doi: https://doi.org/10.1016/j.chest.2021.07.2091

11 PATIL, S. (2021). EPWORTH SLEEPINESS SCALE: A SCREENING TOOL FOR PATIENTS WITH SLEEP DISORDERED BREATHING. *Chest*, 160(4), A2440. https://doi.org/10.1016/j.chest.2021.07.210
12. PATIL, S., 2021. Variability of OSA severity measures on repeated testing. Chest, ISSN: 0012-3692, Vol: 160, Issue: 4, Page: A2441 doi: https://doi.org/10.1016/j.chest.2021.07.2107

