

What Are the Underlying Mechanisms of Reduced Exercise Capacity in Untreated Patients With OSA?

STUDY DESIGN

- Cross-sectional matched observational study
- Underwent spirometry, cardiopulmonary exercise testing with arterial line, resting echocardiography, and assessment of arterial stiffness

14 patients with moderate to severe OSA

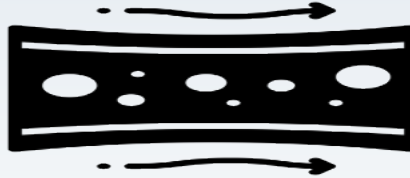
vs

10 control participants

RESULTS

During Rest

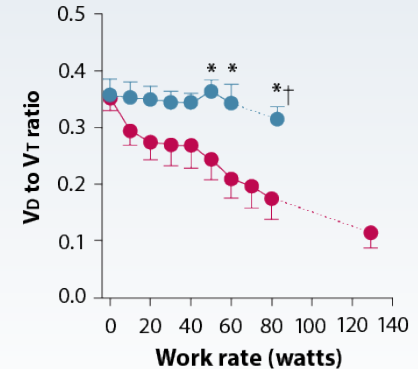
- OSAHS
 - Increased peripheral arterial stiffness



- Pulse wave velocity
 7.3 ± 1.2 m/s vs 5.9 ± 0.9 m/s
- Augmentation index
 $28.6 \pm 12.6\%$ vs $15.3 \pm 4.9\%$

During Exercise

- OSAHS
 - Increased dead space



● Control participants ● Patients with OSAHS

Patients with OSAHS showed evidence of pulmonary gas exchange abnormalities during exercise and resting systemic vascular dysfunction that may explain reduced exercise capacity and increased exertional dyspnea intensity.