

TREATMENT OF

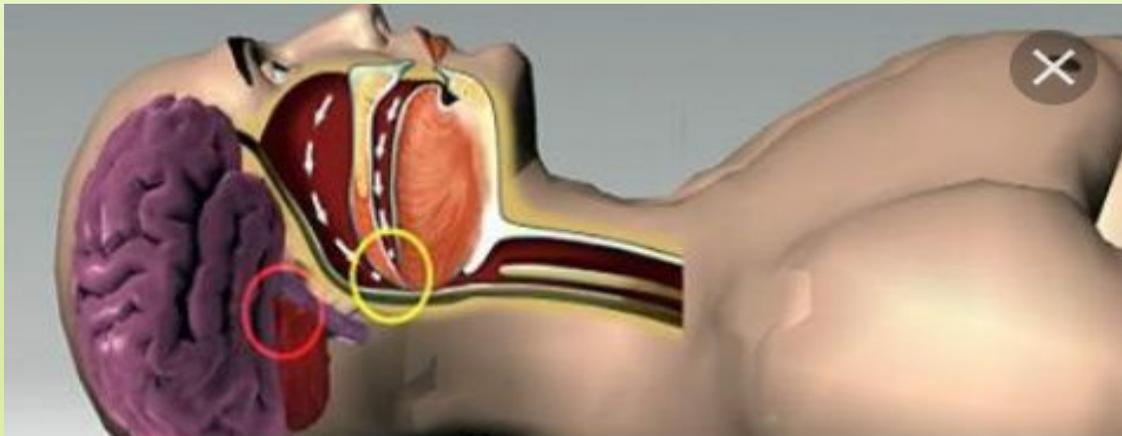
OSA-

CPAP/BPAP

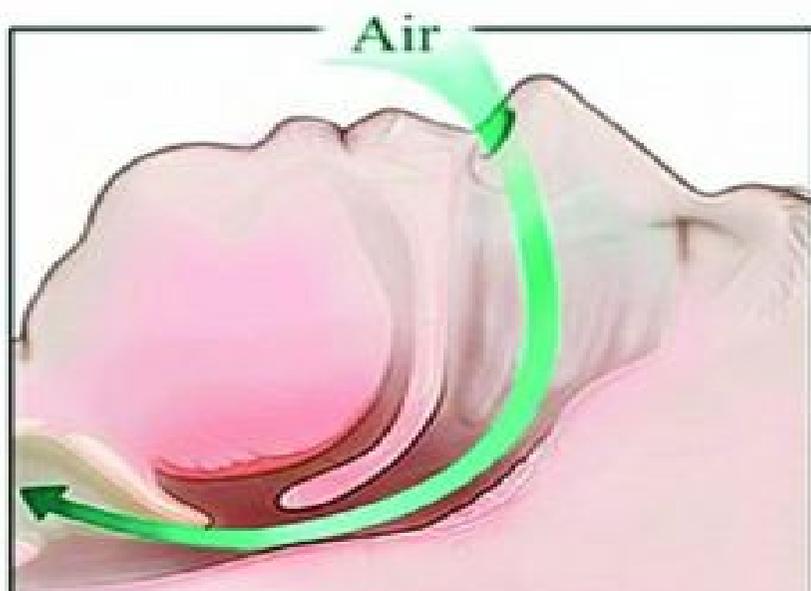
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Obstructive sleep apnea (OSA) is

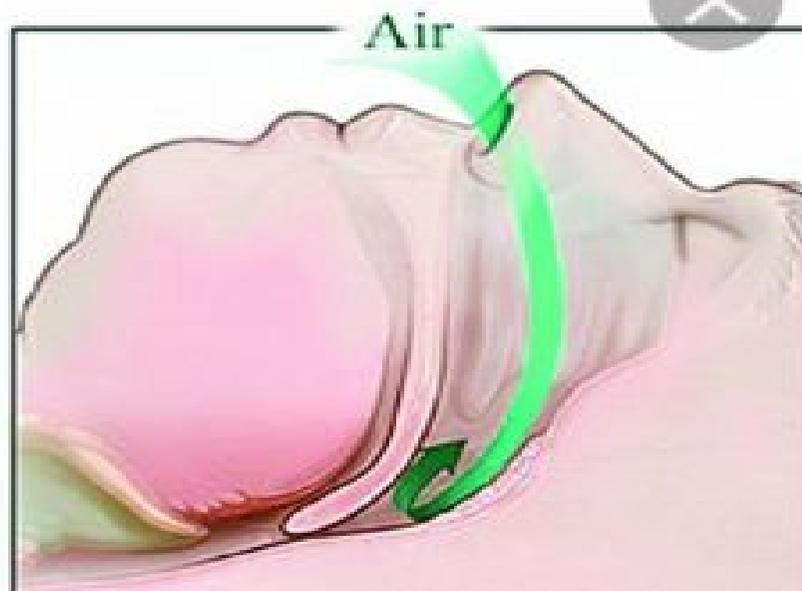
a disorder that is characterized by obstructive apneas and hypopneas due to repetitive collapse of the upper airway during sleep



تنفس طبيعي اثناء النوم



مرضى مصاب بتوقف التنفس اثناء النوم



The goals of OSA therapy



resolve signs and symptoms of OSA,
improve sleep quality, and normalize the apnea-hypopnea index (AHI)
and oxyhemoglobin saturation levels.

GENERAL APPROACH

American Academy of Sleep Medicine (**AASM**),
the American Thoracic Society (**ATS**),
the American College of Physicians (**ACP**),
and the International Geriatric Sleep Medicine Force

are recommended that, in addition to **the behavioral modifications** , **all patients diagnosed with OSA should be offered positive airway pressure as initial therapy.**

EDUCATION AND BEHAVIOR

Once the diagnosis of OSA is confirmed and its severity determined, the results of all testing should be reviewed with the patient.

The patient should be educated about the **risk factors, natural history, and consequences of OSA**

, all patients should be warned about the increased risk of motor vehicle accidents associated with untreated OSA

Behavior modification

Weight loss and exercise



Behavior modification

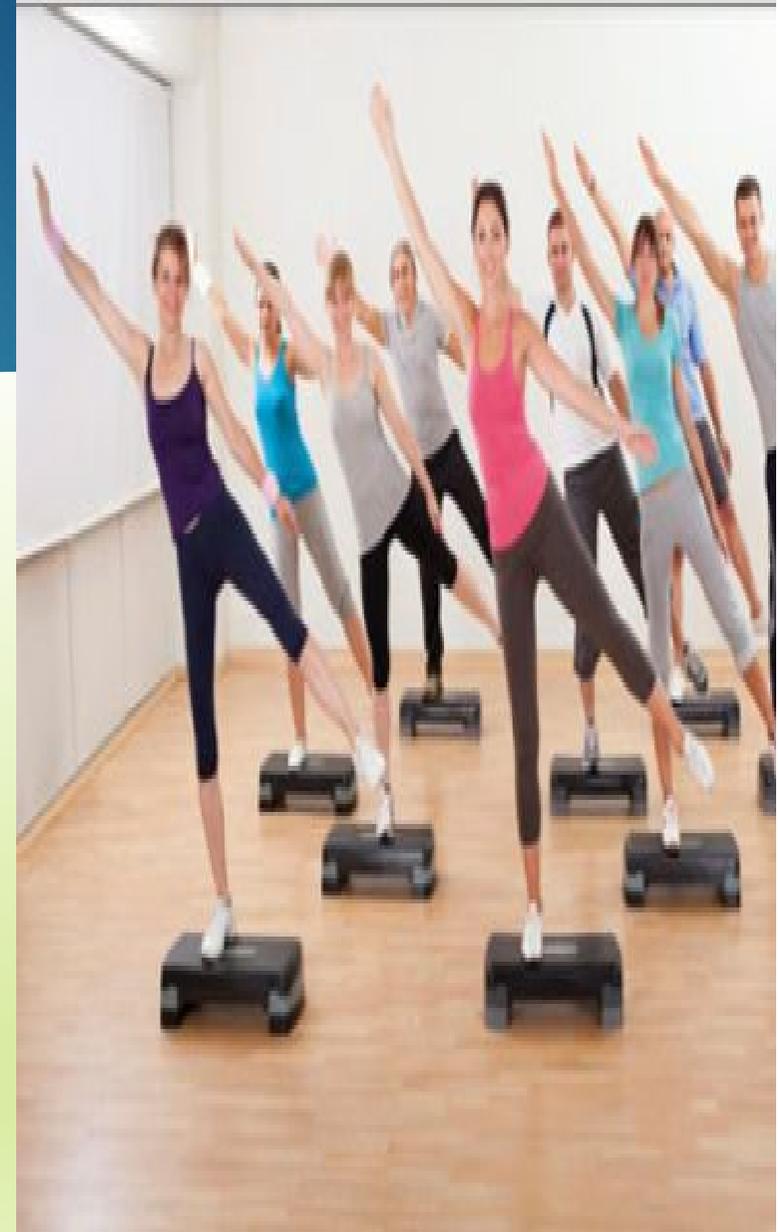
Weight loss and exercise

weight loss, including that from **bariatric surgery**,
improve overall health and metabolic parameters
decrease the apnea-hypopnea index (AHI)
reduce blood pressure
improve quality of life
and probably decrease daytime sleepiness



Counseling regarding ongoing **diet modification** and **exercise** well as **referral to a nutritionist**, may be beneficial

Exercise may modestly improve OSA even in the **absence of significant weight loss**



Behavior modification

Weight loss and exercise

Sleep position



GENERAL APPROACH

Weight loss and exercise

Sleep position

Alcohol avoidance



Behavior modification

Weight loss and exercise

Sleep position

Alcohol avoidance

Concomitant medications:

benzodiazepine receptor agonists, **barbiturates**, other **antiepileptic drugs**, **sedating antidepressants**, **antihistamines**, and **opiates**.

Antidepressants that cause **weight gain**



GENERAL APPROACH

Weight loss and exercise

Sleep position

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POSITIVE AIRWAY PRESSURE THERAPY



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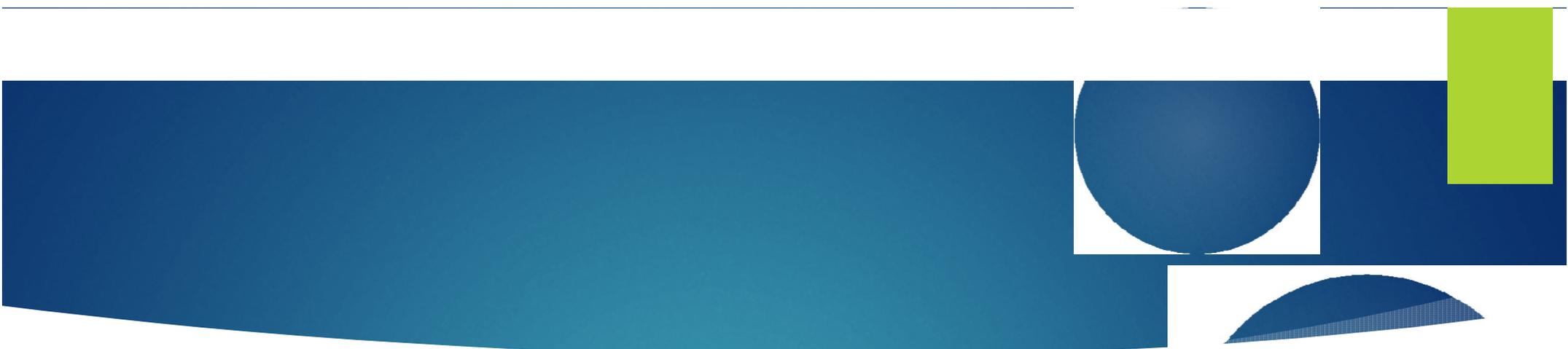
POSITIVE AIRWAY PRESSURE THERAPY

is the **mainstay** of therapy for adults with OSA

. The mechanism of continuous positive airway pressure (CPAP) involves maintenance of a **positive pharyngeal transmural pressure** so that the intraluminal pressure **exceeds** the surrounding pressure.

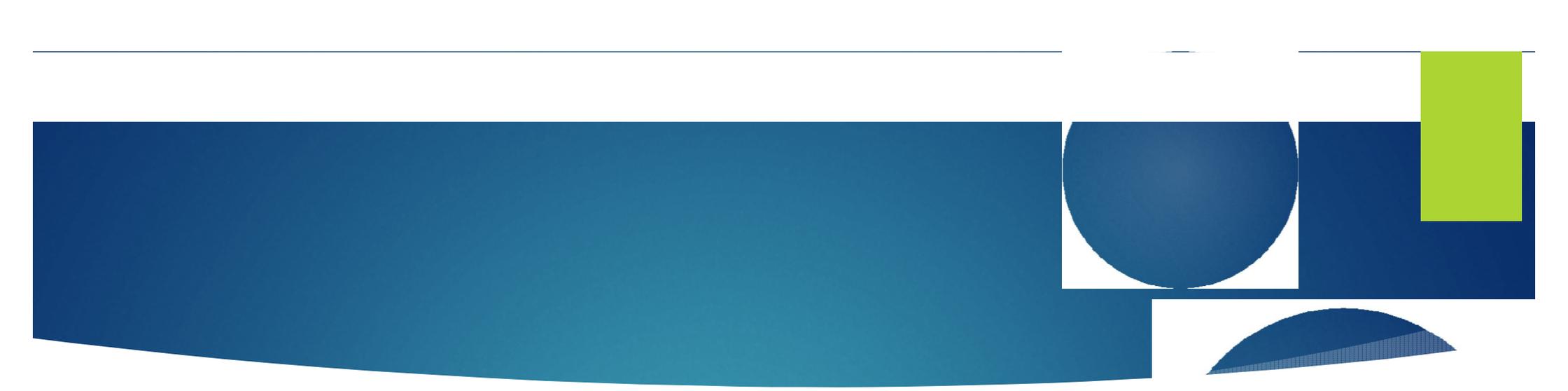
CPAP also **stabilizes** the upper airway through increased **end-expiratory lung volume**.

As a result, respiratory events due to upper airway collapse are prevented.



positive airway pressure therapy:

reduces the frequency of respiratory events during sleep
decreases daytime sleepiness,
improves systemic blood pressure
, lowers the risk of crashes,
and improves quality of life across a range of disease severities
However, no convincing **effect on mortality** has been demonstrated.



More limited data also suggest that positive airway pressure therapy ;
can improve symptoms of :
gastroesophageal reflux
heart failure outcomes,
and reduce the risk of recurrent atrial fibrillation and nocturnal arrhythmias



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