

MODERN TECHNOLOGY AND HEALTHY SLEEP

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All of an about 30% grown man population snore in sleep. Snoring creates not only certain social problems but also is a precursor and one from the basic symptoms of syndrome of obstructive apnea sleep.

Concept "apnea" means the stop of breathing. In medicine distinguish two forms of apnea of sleep: central and obstructive origin. At "obstructive apnea of sleep" stop of breathing arises up because of obstruction (narrowing) of overhead respiratory tracts. During sleep the musculature of body, including musculature of gullet and soft palate, is weakened, that results to falling (западение) the root of tongue and to corking of overhead respiratory tracts.

At the same time a diaphragm continues to get respiratory impulses from a brain, hereupon, abbreviated intensively. Thus there is negative pressure in respiratory tracts, it causes the falling (западение) of respiratory tracts and their corking. In case of stopping of breathing in sleep over 10 sec. of repetitive from 5 to 10 times per hour, an organism begins in earnest to suffer from hypoxia for lack of enough body of oxygen. Because of these episodes of apnea and hypoxia a brain gets signals alarms, causing the urgent awakenings.

At the difficult forms of syndrome of apnea of sleep to 400-500 stops of breathing can be counted for night by general duration to 3-4 hours, that results in sharp or chronic lack of oxygen during sleep. This factor in same queue not only worsens quality of life but also substantially increases the risk of development of hyperpiesis (гипертензия), violations of rhythm of heart, heart attack of myocardium, stroke, unexpected stop of heart in sleep.

Presently diagnostics and treatment of parahypnosis are the article of intensive scientific researches. Most success in treatment of obstructive apnea sleep is arrived at application of nasal respiratory vehicles of increased pressure (NCPAP, auto-CPAP, BiLevel). These devices prevent corking of respiratory tracts through the permanent adjusted current of air, which straightens respiratory tracts and retains their opened, forced individually.

At application of preparations of NCPAP (nasal continuous positive airway pressure), patient constantly gets on an entrance air with enhanceable pressure, for example, 8 mbar. This parameter of pressure, set during the inspection of patient in the laboratory of sleep, is programmed in a vehicle.

Some patients with it is needed obstructive apnea of sleep changing parameters of pressure on an entrance. In this case apply the vehicles of auto-CPAP. They in good time recognize the volume of nascent obstruction and compensate its proper pressure, shutting out closing of respiratory tracts.

Other patients for prevention of corking of respiratory tracts high pressure is constantly required on an entrance. Some of them all more difficult to do exhalation at enhanceable pressure of air. The two-tier vehicles of type of Bilevel are used in parallel instances. In such vehicles pressure of air is considerably mionectic during the phase of output.

In order that air-blasted got in skyways, a nasal mask is needed. This mask is a basic link in treatment of stops of breathing. A blast from a vehicle gets through the system of hoses in a mask, fastened on a head through the special little cap or ribbons. Masks, supplied a spherical hinge, do not limit motion of patient in sleep.

The obligatory condition of the conducted respiratory therapy is the reliable taking of expirate with high maintenance of carbonic acid. For this purpose there are the special adaptations for an output, where through the lateral openings, circular openings or special pores the effective taking of exhaust gases is guaranteed. For achievement of maximal comfort very important is the noiseless functioning of devices. A nasal mask is fastened on a head through the system of fixing.

Patients with sensible, subject to the rapid drying out of mucous membrane of nose, need additional humectants of air. Humectants satiate a blast aquatic steam, protecting skyways from drying out. The so-called humectants with warm air, which the additional heating of the air saturated water is in, are especially effective. This is arrive at more high humidity of air, as compared to humectants with cold air. The selection of humectant is carried out in every case individually.

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