

**References:**

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- 2.Cartwright R. et al. A comparative study of treatment for positional sleep apnea. Sleep 1991;14:546-552.
- 3.Jokic R., et al. Positional therapy versus continuous positive airway pressure in patients with positional obstructive sleep apnea. Chest 1999;115:771-781.

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**POSITIONAL THERAPY FOR  
OBSTRUCTIVE SLEEP APNEA:  
LEARNING TO SLEEP OFF YOUR  
BACK**



**Canadian Sleep Society  
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## **POSITIONAL THERAPY FOR OBSTRUCTIVE SLEEP APNEA: LEARNING TO SLEEP OFF YOUR BACK**

Obstructive Sleep Apnea (OSA) is a disorder where people stop breathing for anywhere from 10 seconds up to minutes while asleep. Apnea means “without breath”. Apnea occurs when there is obstruction of the airway at the back of the throat that causes breathing to stop while sleeping. Short term effects of OSA include disturbed sleep and increased daytime sleepiness. There are also long term complications such as high blood pressure and increased risk of heart attacks and stroke. For more information on OSA see the CSS brochure - Obstructive Sleep Apnea.

It is estimated that about one out of every four patients with obstructive sleep apnea have what is called positional OSA (1). In other words, there are more episodes with pauses in breathing when lying on one’s back versus lying on one’s side. This is not a surprising finding as many bed-partners of OSA patients know from experience. Snoring is reported to be louder and more pauses in breathing are seen while these patients are lying on their backs. In medical terms, sleeping on your back is referred to as supine sleep.

### **Positional Therapy**

Studies have shown the effectiveness of sleeping on your side, called “positional therapy”, for mild to moderate positional OSA (2, 3). Most bed-partners know this therapy from experience. They often try to make their snoring partner move onto their side during the night to stop their snoring. A well-positioned elbow and a vigorous nudge are some of the oldest therapies for snoring! Positional therapy is learning

to sleep off the back. Simply telling yourself to sleep off your back will not work. All of the options listed below are intended to help train the individual to learn to sleep on the side throughout the night. After a period of training the above devices may sometimes no longer be required.

Other therapies for OSA are continuous positive airway pressure (CPAP) or a dental/oral appliance. For some patients on these therapies, learning positional therapy may lower the pressure needed on CPAP, or decrease the amount of adjustment needed on their dental appliance.

There are several strategies that can help people who have mild apnea that occurs mostly when sleeping in the supine position. The strategy used for the devices listed below is to make it uncomfortable to sleep on your back, so that you remain on your side throughout the night. Positional therapy has its limits, but it has been tried with success in some but not all patients.

### **1.Tennis Ball(s)**

This traditional method involves sewing a pocket on the back of a tight fitting tee-shirt to fit just between the shoulder blades. A single or several tennis balls can be inserted into the pocket. Alternatively, sew or attach a sock, filled with tennis balls or a big hard round object (like a piece of wood), length-wise down the back of your pajama top or nightshirt. This makes it uncomfortable to lie on your back and you will usually move onto your side.

### **2.T-shirt**

The anti-snore shirt [www.anitsnoreshirt.com](http://www.anitsnoreshirt.com) fitted with 3 to 4 Styrofoam cylinders on the back.

### **3.Backpack**

A large backpack can be filled with pillows, or a football, and worn to bed. This should prevent the individual from rolling over onto his or her back. Alternatively a pillow backpack can be purchased such as advertised on [www.endsnoringnow.com](http://www.endsnoringnow.com).

### **4.Body Pillow**

Placing a large body pillow lengthwise can prevent rolling on one’s back. Body pillows are available at most large department stores. A large u-shaped body pillow is available from Hammacher Schlemmer [www.HammacherSchlemmer.com](http://www.HammacherSchlemmer.com) (enter key work “body pillow”)

### **5.Positional Alarm**

This positional alarm will be activated by rolling over onto one’s back. Initially it also will cause awakening but after a while one may be trained and alarming will stop.

### **6.Behavioral Therapy**

Behavioral changes are an important part of the treatment program. Behavioral therapy may further improve the response to positional therapy. You should avoid the use of alcohol, tobacco, and sleeping pills (first consult your family doctor), which make the airway more likely to collapse during sleep and intensify and/or prolong the periods where you stop breathing.

### **Other treatment for OSA**

Positional therapy is not advised for all patients with OSA. Especially for severe OSA, the gold-standard of treatment is CPAP therapy. Some patients also find it too uncomfortable to only sleep on their side night-after-night. In this case CPAP therapy or an oral appliance is recommended.