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MENU

Health

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BiPap

What is BiPap?

Some medical problems can make it hard for you to breathe. In these cases, you might benefit from **bilevel positive airway pressure**. It is commonly known as “BiPap” or “BPap.” It is a type of ventilator—a device that helps with breathing.

During normal breathing, your lungs expand when you breathe in. This is caused by the diaphragm, which is the main muscle of breathing in your chest, going in a downward direction. This causes the pressure to drop inside the tubes and sacs of your lungs. This decrease in pressure sucks air into your lungs. They fill with oxygenated air.

If you have trouble breathing, a BiPap machine can help push air into your lungs. You wear a mask or nasal plugs that are connected to the ventilator. The machine supplies pressurized air into your airways. It is called “positive pressure ventilation” because the device helps open your lungs with this air pressure.

BiPap is only one type of positive pressure ventilator. While using BiPap, you receive positive air pressure when you breathe in and when you breathe out. But you receive higher air pressure when you breathe in. This setting is different from other types of ventilators. For instance, continuous positive airway pressure (CPAP) delivers the same amount of pressure as you breathe in and out. Different medical problems may respond better to BiPap versus CPAP.

Why might I need to use BiPap?

BiPap may help you if you have a medical problem that impairs your breathing. For example, you might need BiPap if you have any of the following:

- Chronic obstructive pulmonary disorder (COPD)
- Obstructive sleep apnea

- Obesity hypoventilation syndrome
- Pneumonia
- Asthma flare-up
- Poor breathing after an operation
- Neurological disease that disturbs breathing

BiPap may not be a good option if your breathing is very poor. It may also not be right for you if you have reduced consciousness or problems swallowing. BiPap may not help enough in these situations. Instead, you may need a ventilator with a mechanical tube that is inserted down your throat. Or you may benefit from a tracheostomy—a procedure that creates an airway in your windpipe.

In some cases, people can move off such ventilator support to BiPap as their breathing improves. People who do not want a breathing tube but want some assistance with breathing may also use BiPap.

What are the risks for BiPap use?

BiPap is usually very safe. It has a lower risk of complications, such as infection, compared with ventilator support like a tracheostomy. Most problems from BiPap involve the facemask. It may fit too tightly. Some other risks include:

- Local skin damage from the mask
- Mild stomach bloating
- Dry mouth
- Leaking from the mask, causing less pressure to be delivered
- Eye irritation
- Sinus pain or sinus congestion

Your own risks may differ depending on your age, the amount of time you need BiPap, and your medical problems. Talk with your healthcare provider about any concerns.

How do I prepare for BiPap use?

You should be familiar with the parts of your BiPap machine. They include:

- A face mask, nasal mask, or nasal plugs
- The machine's motor, which blows air into a tube
- The tubing that connects the machine's motor to the mask or plugs

Your BiPap machine might also have other features, such as a heated humidifier.

If you are buying a BiPap machine for home use, you may want to talk with a professional who sells home medical equipment. This person can help you pick the type of BiPap machine best suited to your needs. He or she can also give you instructions about how and when to clean the masks, tubing, and other parts of the machine.

You might want to try several types of masks before deciding on the one you like best. If your mask feels tight, you may need to have it refitted.

Before you start BiPap therapy, your machine may need to be calibrated. Someone from your medical team will adjust the settings. That person is often a respiratory therapist. The settings need to be correct so that you receive the appropriate therapy. You may also get other instructions on how to prepare for your BiPap therapy.

What happens during BiPap use?

You might receive BiPap therapy while at the hospital for a breathing emergency. You also might use it at home for a chronic condition.

Follow your healthcare provider's instructions about when to use BiPap. You might need to use it only while you sleep. Or you might need to use it all the time. You will not receive the full benefits from your BiPap therapy if you don't use it as directed.

When you first start using BiPap, you may feel uncomfortable. It may feel odd wearing a mask and feeling the flow of air. Over time, you should get used to it. If you feel like you really can't breathe while using BiPap, talk with your healthcare provider. He or she may need to adjust the pressure settings on your machine.

It's important not to eat or drink anything while using BiPap. You might inhale food or liquid into your lungs if you do so.

The noise from most BiPap machines is soft and rhythmic. If it bothers you, try using ear plugs. If the device is very loud, check with the medical supplier to make sure it is working correctly.

Talk with your healthcare provider if you are having any symptoms or problems while using BiPap. He or she can help you figure out how to address them. Here are some general tips:

- A humidifier may help reduce nasal dryness. Using a facial mask instead of a nasal mask may also help lessen any eye or sinus symptoms. If you get headaches, they could be due to sinus congestion. In some cases, your healthcare provider might prescribe an antihistamine for these symptoms.
- If you have a leaky mask, skin irritation, or pressure lines, you may need a different size or type of mask. You may also find that adjusting the straps around your mask helps.

- Your healthcare provider may be able to help you avoid stomach bloating by reducing the pressure setting on your machine.

Your healthcare provider may give you other instructions about the best way to use your machine.

What happens afterward?

If your medical problem gets better, you may be able to start using less pressure on your BiPap machine. Or you might be able to use the machine less frequently. Work with your healthcare team to help get the best treatment.

Next steps

Before you agree to the test or the procedure make sure you know:

- The name of the test or procedure
- The reason you are having the test or procedure
- What results to expect and what they mean
- The risks and benefits of the test or procedure
- What the possible side effects or complications are
- When and where you are to have the test or procedure
- Who will do the test or procedure and what that person's qualifications are
- What would happen if you did not have the test or procedure
- Any alternative tests or procedures to think about
- When and how will you get the results
- Who to call after the test or procedure if you have questions or problems
- How much will you have to pay for the test or procedure

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