



Obstructive Sleep Apnea Awareness

Frequently Asked Questions for PAP Troubleshooting

Positive airway pressure (PAP) therapy can provide major benefits for some people, but it is not for everyone. The **initial weeks** after being prescribed PAP are the most important in terms of establishing a routine to support long-term use of the device. Eight out of 10 people using a PAP machine may report some type of problem while attempting to sleep with their device.

Most common problems with PAP are related to specific issues with the **equipment** which produces discomfort. Adjusting the device settings and mask/hose interface are often the only needed solution. In some instances, additional medical intervention may be needed to improve PAP tolerance.

Other common problems can be **behavioral** and due to worsening anxiety or insomnia with use of the device. This can often lead to avoidance or low motivation to attempt to use PAP during sleep. Solutions for these issues can involve device modifications as well as additional support, education, or consultation to assist patients while they gradually adjust to sleeping with the device.

Equipment Troubleshooting

Air leakage and/or eye irritation

Possible solutions:

- Ensure mask is cleaned daily.
- Consider an alternative mask type, such as a nasal pillow, which may allow for more movement during the night.
- Adjust pads and straps to get a better fit. If the mask fits over your nose, make sure it doesn't sit too high on the bridge of your nose, which can direct air into your eyes.
- Some sleeping positions, such as side sleeping, can create position mask leak. Encourage patients with a full face mask to sleep on their back, to try a nasal mask or other style, or consider purchasing a "CPAP pillow" which has side openings.

Skin redness/irritation and/or pressure sores; Headaches

Possible solutions:

- Pay attention to size. PAP masks are usually adjustable.
- Ask your PAP supplier to show the patient how to adjust their mask to get the best fit.
- Use additional padding or mask liners where irritation occurs.
- Reduce humidifier temperature.
- Try an alternative mask style or different headgear.
- Headaches may be caused by a mask that is too tight. Try loosening the straps and consider a different mask size or style.



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"Rainout" and/or excess water in tubing

Popping/gurgling noises while the CPAP is running, water droplets in the mask, CPAP tube or water spraying in patient's face at night are indicative of water in the CPAP tube.

Possible solutions:

- Ask the patient to run the CPAP without any water in the water reservoir for a few minutes until it is dry.
- Use of tube-length insulating wraps will keep the air in the tubing much more insulated and, in turn, reduce the condensation.
- Decrease the humidification setting, and/or use tubing that can be temperature adjusted.
- Add in a heated tube. Most of the more modern CPAP machines have heated tubing available.

Aerophagia

Air passes into the throat and stomach, which can produce bloating, belching, and/or flatulence.

Possible solutions:

- Address nasal congestion or consider a full-face mask which can allow mouth breathing.
- Decrease overall pressures or expiratory pressures on BiPAP units.
- Consider a trial of prescribed or over-the-counter remedies to treat gas/bloating.

Dry mouth, nose, or throat

Possible solutions:

- Most PAP models include a heated humidifier that attaches to the air pressure machine. Adding this or adjusting the settings (i.e., increase temperature) may help.
- If the patient wears a nasal mask or pillows, use of a separate chin strap may help keep the mouth closed and reduce the air leak.
- Consider a full face mask that covers the mouth and nose.

Nasal stuffiness or congestion

Possible solutions:

- Increase humidification.
- Consider non-petroleum based cream in nostrils prior to using PAP.
- Consider a trial of prescription nasal sprays.
- Consider a full face mask that covers the mouth and nose.
- If persistent, consider consultation from an ear, nose, and throat specialist.



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Behavioral Troubleshooting

Feeling “suffocated” or difficulty tolerating forced air

Possible solutions:

- Set or adjust the “ramp” feature, which allows the patient to start with low air pressure, followed by an automatic, gradual increase that eventually sets itself to the pressure they were prescribed.
- Consider reducing pressure settings during initial weeks of therapy to allow tolerance to build, then increase pressure settings once comfort/tolerance is achieved.
- Consider a switch to BiPAP with reduced expiratory pressures.

Feeling anxious or claustrophobic when using PAP mask

Possible solutions:

- Suggest patients practice relaxation exercises prior to putting on the mask. Diaphragmatic breathing, mindfulness, or progressive muscle relaxation are effective ways to reduce anxiety.
- Suggest patients practice use of the device during the day (i.e., when not trying to sleep) to “*desensitize*” to the mask, air pressure, and related sensations that might create initial discomfort when attempting use during sleep. By using the device during periods of awake relaxation, this can help “retrain” the patient to associate the PAP with being relaxed for use during sleep.
 - For desensitization practice (with the PAP during the day), suggest that patients always pair this with another activity, such as relaxation exercises, watching calm TV or movies, working on a puzzle or mental activity (e.g., Sudoku), listening to relaxing music, or performing another mundane task (e.g., washing dishes).
 - Initially, suggest to have the patient wear just the PAP mask for short periods of time, followed by attaching to the hose with the machine turned on during the day.
 - Once they can tolerate the mask for longer periods while awake, suggest starting to use the PAP device during a short nap, and then eventually attempting to use during sleep at night.
- Consider the need to refer patients to additional resources. Relaxation skills can be trained using smartphone apps or consulting with a behavioral health provider, if available. Psychologists, respiratory therapists, or sleep therapists can also provide additional coaching to help patients desensitize to the PAP when sleeping.

More difficulty falling asleep when using PAP

Possible solutions:

- Recommend relaxation and desensitization practice during the day as well as while winding down for going to bed, as described above



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- Encourage patients not to attempt to get into bed for sleep until they actually feel sleepy.
- If difficulties falling asleep are persistent, this may represent a separate sleep issue that may need separate treatment (e.g., insomnia disorder). Consider consultation with a sleep specialist or behavioral health provider for further evaluation.

Regular non-adherence or low motivation to use PAP during sleep

Possible solutions:

- Engage patient in discussion to clarify understanding for what sleep apnea is, why they have been recommended PAP, and some of the common nighttime as well as daytime problems that are associated with untreated sleep apnea.
- Ask patients how sleep apnea may be impacting them, and whether issues with sleep may be affecting other areas of their life (e.g., health, daytime function, family/work responsibilities). Then ask whether the benefits of treatment outweigh the potential discomforts they might experience as they get used to using the device.
- Assess for any other equipment or behavioral barriers (listed above) and identify potential solutions collaboratively with the patient.
- Acknowledge to patient that it may take time to get used to using the PAP device during sleep, and provide encouragement that patience and consistency may be required as they attempt to build a routine around nightly use of PAP.
- Consider referral to a behavioral health provider or a sleep specialist to further assist with a behavior change plan to target PAP adherence.

Resources

1. Haynes, P.L., Lee, K., Young, J., (2014). Difficulty Using Your PAP Machine? Educational Brochure: Society of Behavioral Sleep Medicine.
2. CPAP machines: Tips for avoiding 10 common problems <https://www.mayoclinic.org/diseases-conditions/sleep-apnea/in-depth/cpap/art-20044164>
3. Obstructive sleep apnea: CPAP therapy: How to deal with common problems. 2011 Jul 22 [Updated 2019 Jan 3]. Available from: <https://www.ncbi.nlm.nih.gov/books/NBK279273/>
4. HARVARD HEALTH BLOG: I can't tolerate CPAP, what can I do? <https://www.health.harvard.edu/blog/i-cant-tolerate-cpap-what-can-i-do-2020072920672>
5. Obstructive Sleep Apnea CPAP Therapy Booklet <https://www.healthquality.va.gov/guidelines/CD/insomnia/OSACPAPTherapyBookletFinal508c6Nov2020.pdf>

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