

Transtracheal Oxygen Therapy (TTOT)

An alternative to a nasal cannula transtracheal oxygen (TTOT). Transtracheal oxygen therapy is a method used to deliver oxygen directly to the lungs. It is used to treat chronic hypoxemia (low blood oxygen).

A small plastic catheter is surgically placed in your neck and sits in your windpipe (trachea). Oxygen is delivered through the catheter directly into your windpipe. The procedure should not be confused with a tracheotomy; they are entirely different.

TTOT has been shown to reduce oxygen flow requirements by as much as 55 percent at rest and 30 percent during exercise. Because less oxygen is required, portable oxygen systems last longer, and people can use smaller and lighter units.

When Is TTOT Considered?

TTO is considered for any person who is on long-term oxygen therapy and desires an improvement in oxygen requirements. Talk to your health care provider about whether TTO is a good option for you.

Suggested candidates for TTOT include people who:

- Meet current guidelines for long-term oxygen therapy
- Are currently active in and outside of the home
- Comply with oxygen therapy and can provide proper care of their catheter.

What are the benefits of TTOT?

TTOT can improve quality of life for people who have a chronic lung disease.

Examples are:

- Chronic Obstructive Pulmonary Disease (COPD)
- Interstitial Lung Disease (ILD)
- Advanced fibrotic lung disease, such as Idiopathic Pulmonary Fibrosis (IPF)

TTOT can:

- Reduce the amount of oxygen flow needed to achieve healthy oxygen levels
- Improve activity levels and mobility
- Improve exercise capacity
- Improve physical, social and mental function
- Improve the response to oxygen treatment
- Reduce length of hospitalization.
- Relieve irritation from the nasal cannula
- Allow you to “hide” your oxygen tubing under your clothes.

As with any medical procedure, there are risks involved. Consult with your health care provider about these

risks.

What are the phases of TTOT Care?

Phase 1 – Patient Screening

During this phase, you will have an opportunity to learn about the benefits and risks associated with TTOT. The doctors, nurses, respiratory therapists and perhaps other people who have gone through the TTOT procedure will be available to answer your questions. Your provider will perform a physical exam, take your medical history and determine whether you are a good candidate to receive TTOT.

Education will be provided by your respiratory therapist following your doctor visit.

Phase 2 – The TTOT Procedure

If your doctor feels you are a good candidate, a consult will be scheduled with the performing surgeon, who will then schedule the procedure. The Fast Track procedure requires an overnight stay. The procedure uses a stent to create the hole for the catheter. The next morning, the stent is removed and the catheter is put in place.

Phase 3 – Care while the TTOT Tract Is Healing

Once the catheter has been placed, proper care is very important. You will clean the catheter in place at home and will come to the respiratory care department twice a week for postoperative care. The therapist will inspect the site and change the catheter for you until you are ready to take on self-care.

Phase 4 – Care when the TTOT Tract Has Healed, Graduation Day!!!

You are ready and capable of self-care. This is when the Respiratory Care Team transfers responsibility over to you. Changing the catheter is recommended twice a day. New catheters are supplied for you by your DME (durable medical equipment) service every 90 days.

The Role of National Jewish Health

National Jewish Health offers a Transtracheal Oxygen Program. Our care team can evaluate and manage patients for whom transtracheal oxygen may be a good option for their long-term oxygen therapy. Talk with your health care provider if you have questions or are interested in TTOT.

Visit our website for more information about support groups, clinical trials and lifestyle information.

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NOTE: This information is provided to you as an educational service of National Jewish Health. It is not meant to be a substitute for consulting with your own physician.

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