

Tracheotomy Care Manual For Parents

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2nd Edition

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Introduction

Your child needs a tracheotomy. Like most unfamiliar things, this can be very scary for you as parents.

This manual will help to give you some important information that you need to know to care for your child's tracheotomy. In addition to the manual, a specially trained nurse will work closely with you to teach you all about the tracheotomy and the care your child will need. As you begin to learn the care, you will become more comfortable with your child's tracheotomy needs.

It is important for you and your child that you understand about your child's tracheotomy. Please feel free to ask questions. The nurse teaching you about the tracheotomy and your Ear Nose and Throat doctor are always available to answer any questions you may have.

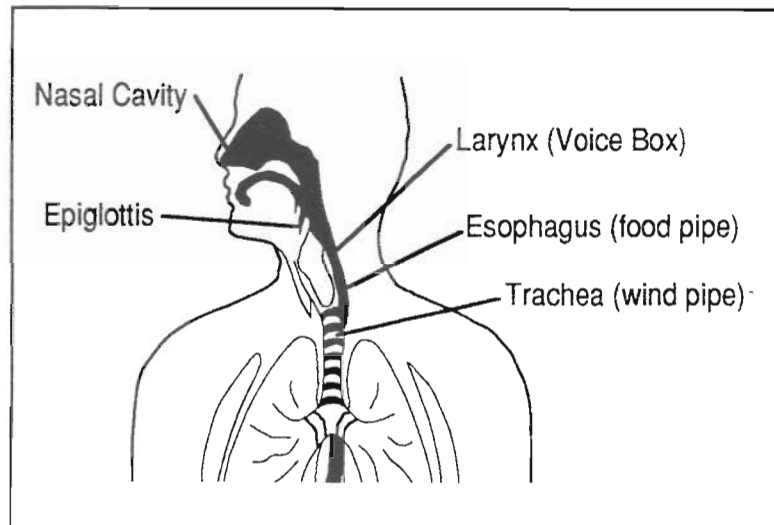


Tracheotomy

What is a tracheotomy?

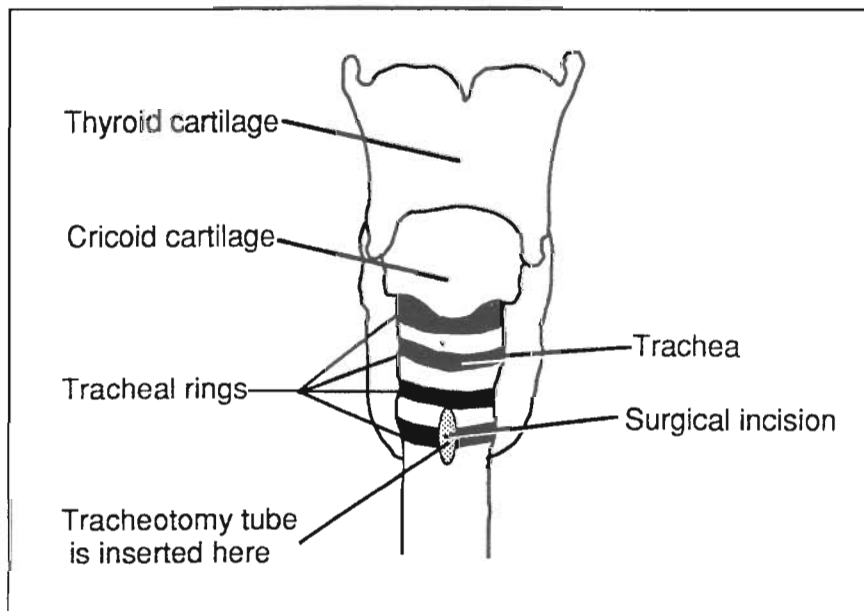
To understand fully about your child's tracheotomy it is important that you understand some fundamentals about the airway and the respiratory system.

The trachea is a tube or the "windpipe" that connects the back of the throat to the lungs. The trachea allows the passage of air (oxygen) to the lungs and provides a way for air to be exhaled (carbon dioxide). The trachea is made of rings which form a tube.



The esophagus, the "food tube" is connected to the back of the trachea. The esophagus is a separate tube that allows food to reach the stomach.

A tracheotomy is a surgical operation. The operation is done by making an incision (a cut) through the neck into the trachea (the breathing tube or windpipe). A tracheotomy tube is then placed in the opening. The tracheotomy tube is secured in place with a tracheotomy tie (twill tape).



Why is a tracheotomy done?

Common reasons:

1. There may be an obstruction (blockage) therefore oxygen cannot get from the nose and mouth into the child's lungs. For example there may be a narrowing of the trachea.
2. To help a child cough up secretions (lung disease).
3. To help a child who has weak muscles and needs help getting oxygen into his/her lungs (neuromuscular disease).
4. To make a child more comfortable who needs to be on a ventilator (breathing machine) for a prolonged period of time.

The tracheotomy makes it easier for a child to breathe:

1. It can bypass the obstruction allowing oxygen to come through the tracheotomy tube into the lungs.
2. It can make it easier to remove secretions.
3. It reduces the amount of space from the lungs to the outside, so airflow is easier.

Why your child has a tracheotomy tube:

Your child, _____
(child's name)

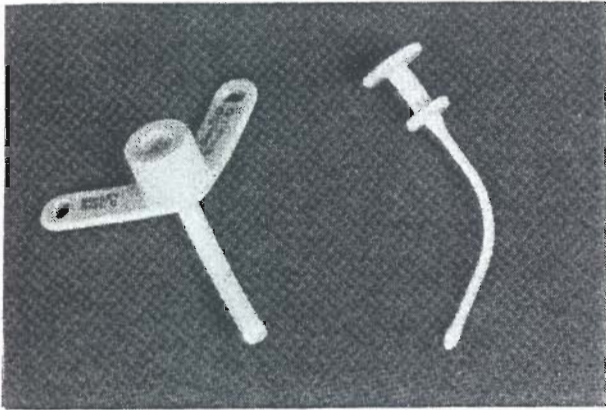
has his/her tracheotomy tube

because of _____

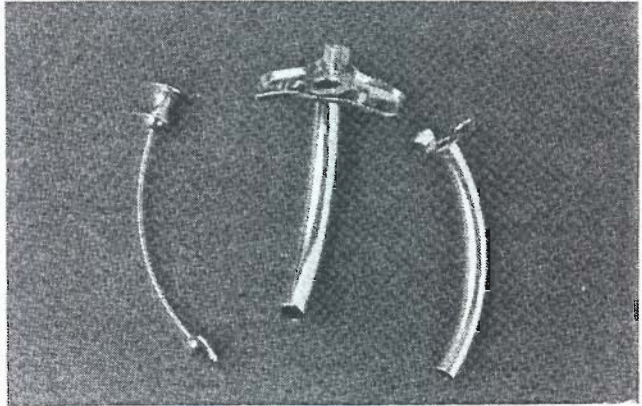
Tracheotomy Tubes

Tracheotomy tubes come in different sizes, shapes and brands. As your child grows, he/she will need a larger tracheotomy tube. Changing the size of the tracheotomy tube is done in the office. It usually does not require surgery. Your nurse and doctor will follow your child closely and decide when a bigger tracheotomy tube is necessary.

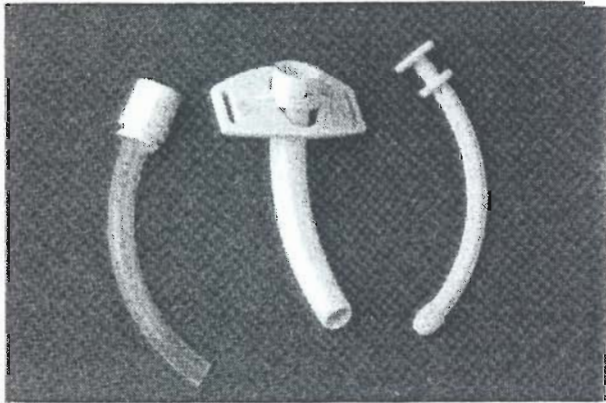
Shiley



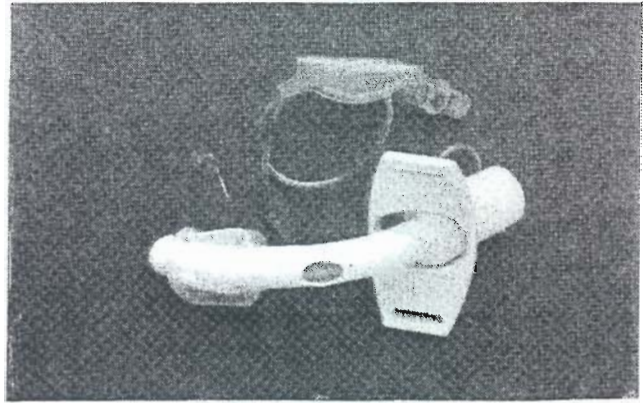
Hollinger



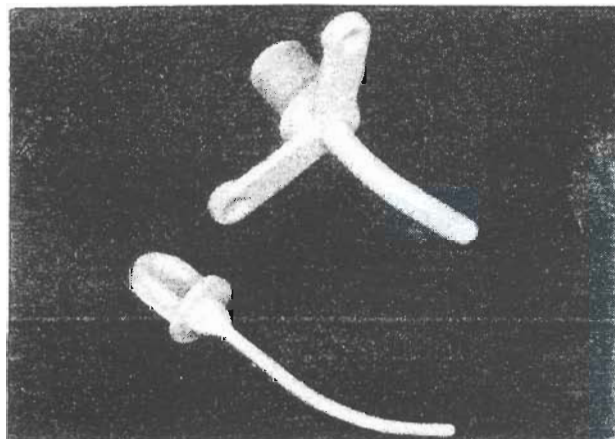
Shiley with Inner Cannula



Shiley (Cuffed Tube)



Bivonna



Date of tracheotomy tube insertion: _____

Tube type: _____

Tube size: _____



Caring For Your Child's Tracheotomy

Suctioning

When the tracheotomy is first done, your child may produce a large amount of mucous (secretions). This is normal, the body is reacting to a small irritation (the tracheotomy tube) in your child's windpipe. In a couple of weeks the amount of mucous will usually decrease.

To remove mucous from the tracheotomy tube and to keep the tracheotomy tube patent (open) you will need to suction the tracheotomy tube.

When do I suction my child's tracheotomy tube?

Suctioning is done only when your child needs it. Initially, this maybe done frequently (every four hours). Eventually the amount of secretions will lessen, and the child will only need occasional suctioning. Often times, the child will be able to "cough up" the secretions.

Some clues to let you know when to suction:

1. "Gurgly" sound means there is mucous that needs to be removed.
2. A "whistling" noise when your child is breathing.
 - This can indicate thick secretions partially blocking the lumen (inside) of the tracheotomy tube.

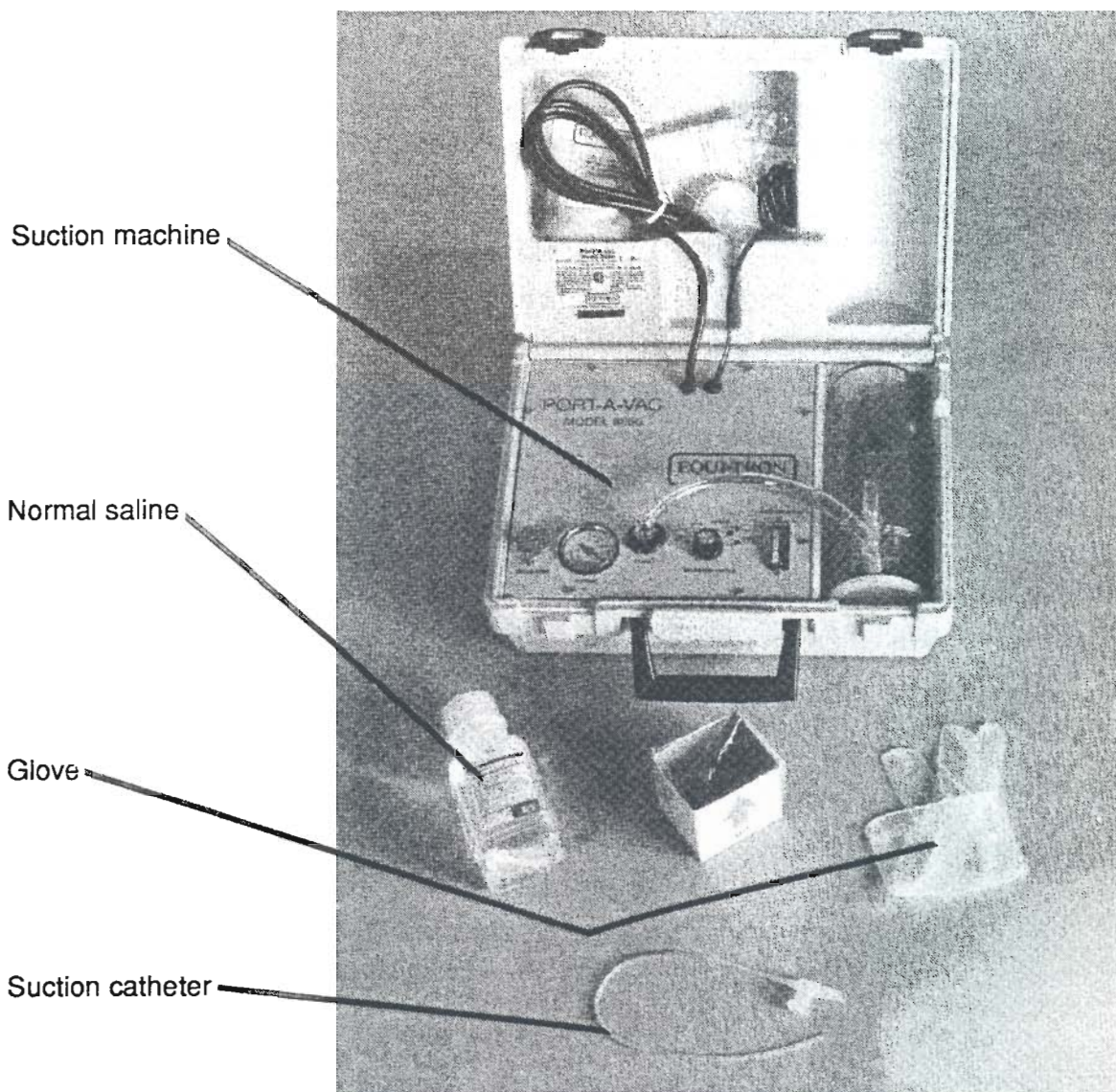
Some of the signs of difficulty breathing are:

- Your child may be restless despite comfort measures
- A change in breathing pattern
 - (is your child breathing faster or harder?)
- A change in the sounds your child makes with breathing.
- Your child may have retractions
 - (the ribs and breast bone may be moving differently because of mucous plugging the tracheotomy tube).
Your child is "working too hard" to breathe
- A change in your child's color from pink to grey or blue.

How to Suction

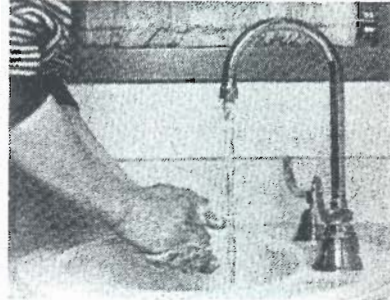
Needed supplies:

- Suction catheter
- Size catheter _____
- Normal saline (salt water)
- Portable Suction Machine
- Gloves (optional)



How do I suction my child's tracheotomy tube?

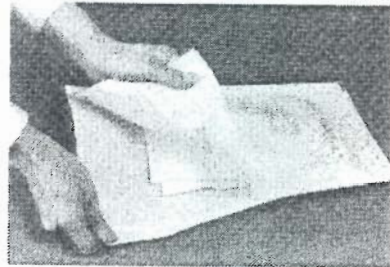
1. Wash your hands with soap and water.



2. Open the suction catheter .

You may wear gloves if you like.

Use a "clean technique", make sure the catheters' tip being inserted into the tracheotomy tube is kept clean.



3. Pour normal saline into a small container.
Turn on your suction pump.

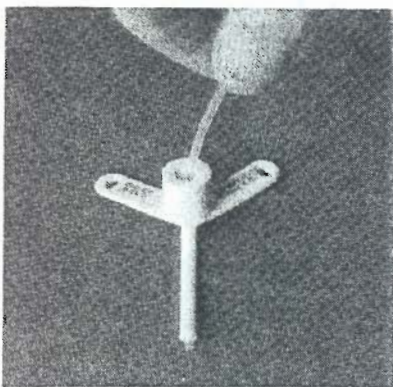


4. Connect the suction pump to the tubing from your suction pump. Check to make sure your suction pump is working.

(This is done by placing the tip of the suction catheter in the normal saline and applying suction.)

5. It is most important that the tip of the catheter that is placed in the tracheotomy tube is kept clean.

6. The suction catheter is placed in the tracheotomy tube. Make sure when inserting the catheter that your finger is OFF the suction control hole.



7. Place it in the suction catheter approximately _____ inch, this is far enough to clean the tube, including the tip.

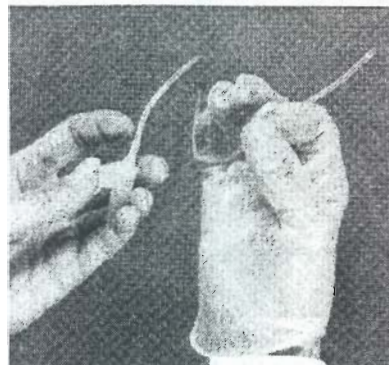
The obturator can be used as a guide to determine how far to insert the suction catheter.

Helpful Hint: Coughing and/or gagging may occur with suctioning. Do not be afraid, go ahead with suctioning.

-
8. Apply suction by placing your finger over the control hole, as you pull the catheter out, twist the catheter.

This helps to remove mucous along the inner diameter of your child's tracheotomy tube.

This should take 5-10 seconds.



Helpful Hint: To decide how quickly to withdraw the suction catheter from your child's tracheotomy tube, try holding your breath while suctioning.

9. Watch your child and listen to how he/she is breathing.

If your child has some "rattling" (mucous in the tracheotomy tube), but is comfortable, wait and observe before suctioning again.

10. Pass the catheter one to three times, as needed.

Helpful Hint: Too much suctioning can be irritating to the trachea can cause more secretions. Sometimes just waiting and watching will let you know whether or not you need to try suctioning again.

11. You may rinse the suction catheter thoroughly with normal saline. You can then store and re-use the catheter.

12. If the mucous is thick and you are unable to suction the tube:

- Normal saline (3-4 drops) can be placed in the tracheotomy tube.
- This may cause your child to cough.
- Suction your child,listen and watch how your child is breathing.



Notes:

Stoma Care

The opening in the skin where the tracheotomy tube is located, is called the tracheal stoma. This area needs to be kept clean and dry. After surgery, there may be some mucous and discharge. This will stop after about 1-2 weeks.

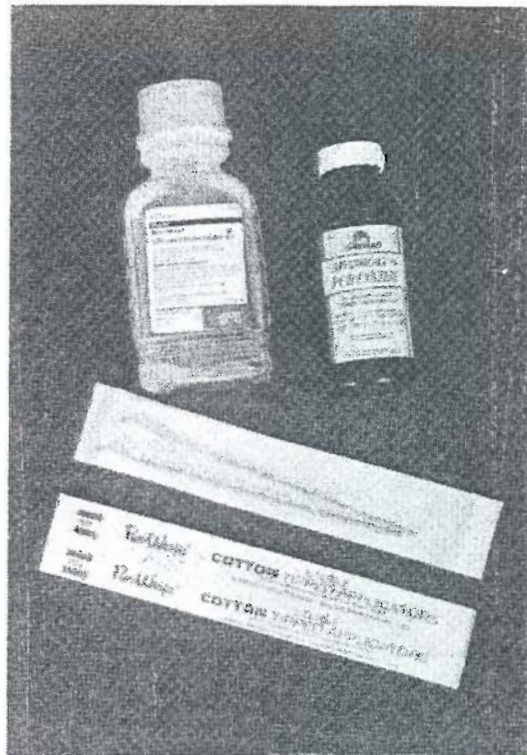
After surgery the stoma is cleaned with half strength Hydrogen Peroxide and normal saline, rinsed with normal saline, then dried, using Q-tips. Once the stoma is well healed, after 2-3 weeks, the stoma may be cleaned with soap and water.

When do I do Stoma Care?

- One to two times a day
- or
- Whenever there is mucous around the stoma

Needed supplies:

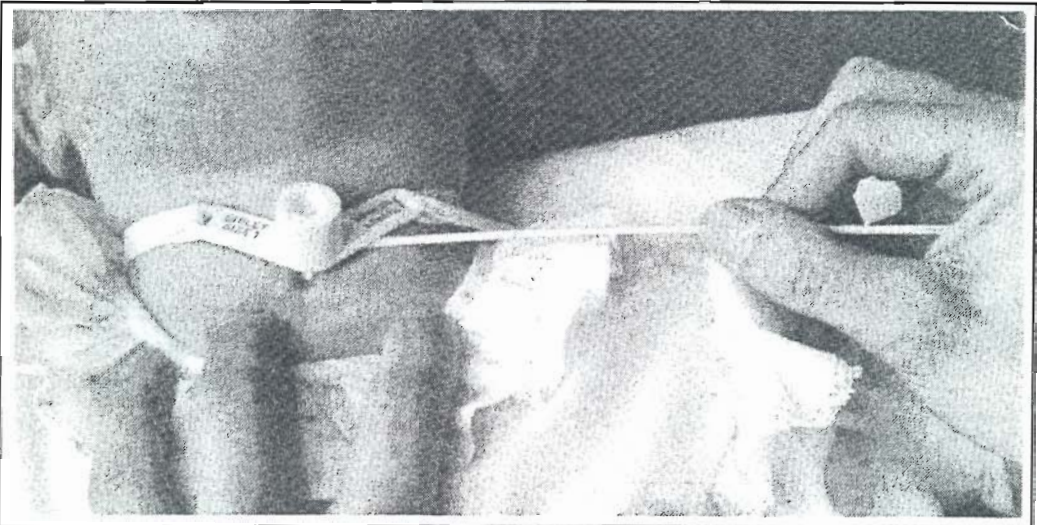
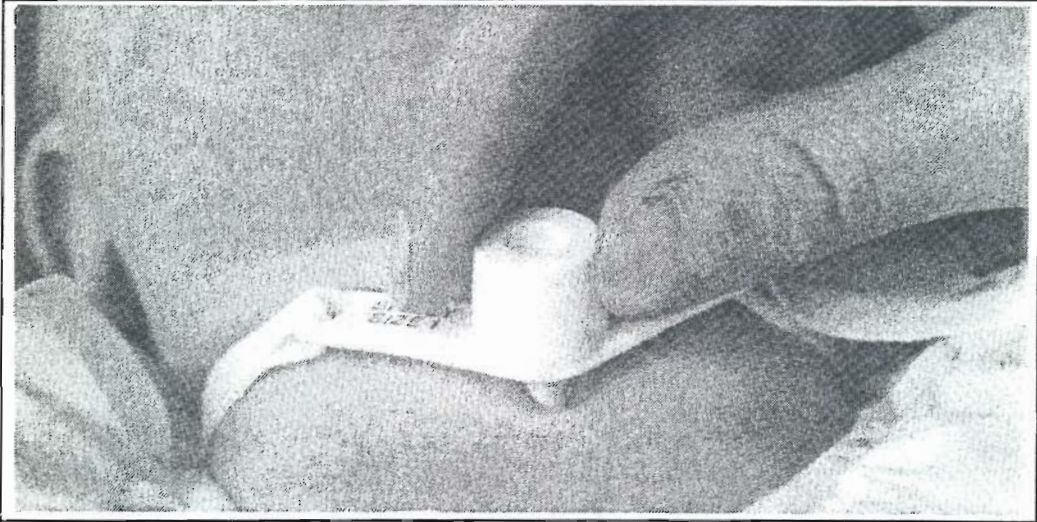
- Warm water
- Soap
- Washcloth
- Q-tips
- Optional:
 - Hydrogen Peroxide
 - Normal Saline (salt water)
or Sterile Water



How to Care For My Child's Tracheal Stoma?

The stoma may be cared for at home with warm water and soap. Hydrogen peroxide and sterile water or normal saline may be used if there is "crusted" mucous around the child's stoma. This should be done 1-2 times a day. Use creams on the stoma if ordered by your Ear, Nose and Throat doctor. Notify the **Ear, Nose and Throat doctor** if any areas become reddened, bleed or have an odor.

Names of creams:

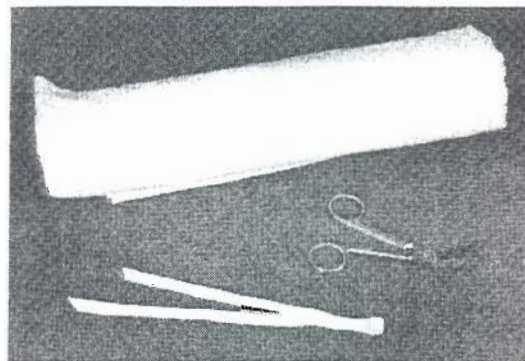


Tracheotomy Tie Change

The tracheotomy tube is held in place with a tracheotomy tie (string). The tie needs to be kept clean and dry. This is important to prevent skin irritation of the neck. The tracheotomy tie needs to be changed once a day.

Needed supplies:

- Tracheotomy tie
- Scissors
- Roll for underneath child's shoulder



How do I change my child's tracheotomy tie?

Two people should be present to change the child's tracheotomy tie.

1. Wash your hands.
2. Position your child, by placing a roll (blanket or towel) under your child's shoulder so that his/her neck is extended.



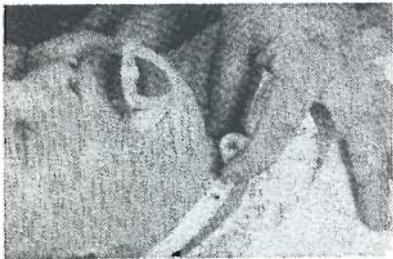
This will let you see the tracheotomy tube better.

3. One person holds the tracheotomy tube firmly to your child's neck.



4. Cut the tracheotomy tie that was holding the tracheotomy tube in place, remove the old tie from the tracheotomy tube.

-
5. Using the new tracheotomy tie, thread it through the hole in the wing of the tracheotomy tube.



6. Bring the tie around the child's neck, thread it through the other side.
7. Make sure the tie is snug around the neck.
8. Remove the roll from under the shoulders.

9. Tie the two ends together on one side of the neck with a loose square knot.

Never use a bow tie.

- Alternate sides, one day the left side, the next day the right side.)



10. Gently bring your child's chin to his/her chest. You should be able to fit one finger comfortably between the tie and the child's neck.
- It is important to make sure that the tie is:
- **Not too tight** - causing pressure on the skin and skin breakdown and
 - **Not too loose** - this will allow the tube to become accidentally dislodged
11. Now, secure the tracheotomy tie with a square knot.

Changing the Tracheotomy Tube

The tracheotomy tube is changed weekly. If you are ever concerned that your child's tracheotomy tube is plugged with mucous, or the secretions are too thick, you may need to change the tracheotomy tube more often. The tube can be changed everyday if needed and it is safe for your child to do so.

- Two people should be present when changing the tube.
- Place the child in the same position as when changing the tie.

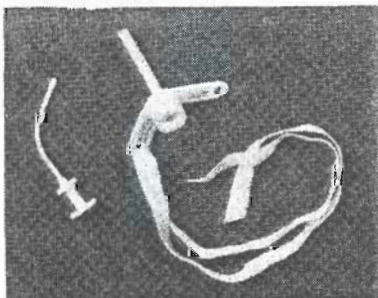
Needed supplies:

- Scissors
- Tracheotomy tubes
 - the size your child is wearing
 - also have the next smaller size available
- Lubricating jelly (K-Y Jelly, Surgilube)
 - **NOT Vaseline Jelly**



How do I change the tracheotomy tube?

1. Wash your hands.
2. Prepare tracheotomy tube.
 - Open the package.



- Place the obturator in the tracheotomy tube.
 - Place a small amount of lubricating jelly on the end of the tracheotomy tube.
-
- If you want to, you can thread the tie through one end of the ends of the tracheotomy tube.

-
3. Position your child as you do when changing the ties.
 4. Suction if necessary.
 5. Cut the child's tracheotomy ties and remove them from around the child's neck.
 6. Pull the old tracheotomy out, with an upward and backward movement.
 - Do this when you child breathes out (*expiration*) if possible.



7. Pull the new tracheotomy tube in, with a downward and forward motion.
 - Do this when your child breathes in (*inspiration*) if possible.
8. Immediately pull the obturator out.
 - Look, listen and feel for your child's breathing
9. Tie the new tracheotomy tube securely in place.

If the new tube will not go in:

1. Check your child's position -
adjust the roll under the shoulder and hyperextend the neck.
2. Wait for your child to take a breath
the stoma will open and the tube should insert easily.
3. Gently pull downward on the bottom of the stoma and
attempt to insert the tube. Make sure the tube is well lubricated.
4. Try again with the next smaller size tracheotomy tube.
5. If you are unable to insert the smaller tracheotomy tube,
place a suction catheter into the stoma, about one inch.
6. Call your Ear, Nose and Throat doctor, and let them know
of any problems you have with weekly tube changes.

***Call your Rescue Squad and bring the child
to the Emergency Room.***

*Always call your Ear, Nose and Throat doctor
if you have had difficulty inserting the tracheotomy tube.*

Signs that your child may be having trouble breathing

- Coughing increases.
- Change in his tracheotomy secretions - thicker, yellow/green.
- Change in how fast you child is breathing
- Change in child's color. Check lips and nailbeds.
- Whistling through the tracheotomy tube.
- Change in how his or her chest is moving - retractions.
- Change in voice. Is your child able to cry or make sounds he/she was not making before? This may be a sign of a plugged tracheotomy tube.

What to do if your child is having difficulty with his/her tracheotomy tube

1. Suction your child's tracheotomy tube.
2. If the mucous is thick, put a few drops of normal saline (salt water) into the tracheotomy tube.
3. Suction the child again.
4. If this does not help the child's breathing, remove the tracheotomy tube and replace it with a clean tracheotomy tube.
5. If the child continues to have difficulty breathing contact your doctor immediately.

CPR - Infant

CPR for an infant

If your infant's monitor alarms, CPR may need to be done. Always make sure your infant is breathing, never just turn the monitor off.

First gently shake your infant. Call your child's name to try and wake him/her. If there is no response - call for help in the house.

A = Airway

Check the Tracheotomy Tube

- Place the infant on his/her back.
- Place on a firm surface.



B = Breathing

If your infant is not breathing:

- **LOOK** - at the child's chest. Is it moving up and down?
- **LISTEN**- for sounds of breathing
- **FEEL** - for breath on your cheek



- Give two breaths into the tracheotomy tube.
 - **You can do mouth to tracheotomy tube or ambu resuscitation bag to tracheotomy tube.**
- As you give the breath, see if the chest moves.
- If the chest does not move, the tracheotomy tube may be plugged.
- Suction the tracheotomy tube.
- Attempt to breath again.
- If the chest does not move, change the tracheotomy tube.
- Attempt to restore breathing again, by giving 2 breaths into the tracheotomy tube.

C = Circulation

Check for a pulse:

- Feel the brachial pulse.
(This between the elbow and the shoulder).
- Feel with two fingers, **NOT your thumb**.
- If there is a pulse, continue to breathe for your infant. **15 breaths a minute**.



If there is no pulse:

Give chest compressions:

- Use the middle two fingers of one of your hands.
- Place the two fingers of your hand on the breast bone (sternum) where the ribs join the sternum.
- Compress 1/2 to 1 inch.
- Give at least 100 compressions a minute.

When breathing and giving compressions:

- Give 1 breath and do 5 compressions.
- Do 10 cycles.
- Check for breathing and for return of pulse.
- If you are alone call your Rescue Squad.
- Return to your infant and continue CPR.

CPR - Child

CPR for a child

If your child's monitor alarms CPR may need to be done. Always make sure your child is breathing, never just turn the monitor off.

First gently shake your child. Call your child's name to try and wake him/her. If there is no response - call for help in the house.

A = Airway

- Place the child on his/her back.
- Place on a firm surface.



B = Breathing

If your child is not breathing:

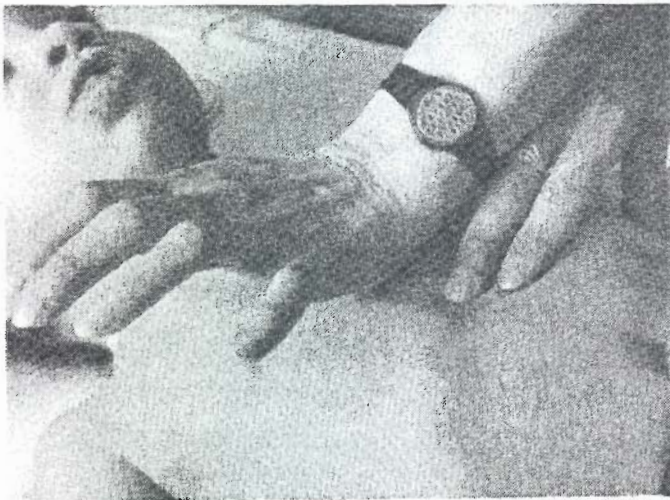


- Look, listen and feel.
- Can you feel or see the chest move?
- Give two breaths into the tracheotomy tube.
You can do mouth to tracheotomy tube or ambu resuscitation bag to tracheotomy tube.
- As you give the breath, see if the chest moves.
- If the chest does not move, the tracheotomy tube may be plugged.
- Suction the tracheotomy tube.
- Attempt to breath again.
- If the chest does not move, change the tracheotomy tube.
- Attempt to restore breathing again by giving 2 breaths into the tracheotomy tube.

C = Circulation

Check for a pulse:

- Feel the carotid pulse. (This in the neck).
- If there is a pulse,
 - continue to breathe for your child.
 - 15 breaths a minute.



If there is no pulse:

Give chest compressions:

- Use the heel of one hand
- Place the heel of your hand on the breast bone (sternum) where the ribs join the sternum
- Compress 1 to 1 1/2 inch
- Give at least 80-100 compressions a minute.

When breathing and giving compressions:

- Give 1 breath and do 5 compressions.
- Do 10 cycles.
- Check for breathing and for return of pulse.
- If you are alone call your Rescue Squad.
- Return to your infant and continue CPR.

Common Questions and Answers

Can my child eat?



There is one passage for eating and one passage for breathing. The tracheotomy tube is in the breathing passage. The eating tube (the esophagus) has not been changed and your child usually should be able to eat and drink normally.

A cloth bib can be placed under your child's chin during feeding. This will prevent food from spilling into the tracheotomy tube. Never use a plastic bib.

If your child vomits into the tracheotomy tube, food may go into the trachea. Suction the tracheotomy tube.

Why can't my child cry or talk?

Air comes from the nose and mouth through the voice box when we make sounds. The tracheotomy tube changes the passage of air. Most of the air goes in and out of the tracheotomy tube, therefore children with tracheotomies often cannot cry or talk. Sometimes as your child grows he/she may be able to get some air around the tracheotomy tube and make sounds.

How do I bathe my child?

Your child can be placed in a bath tub, but keep the water as shallow as possible to avoid splashing into the tracheotomy tube. Never let the child lay down, water will go into the tracheotomy tube and he/she could drown. ***Never leave your child alone!***



What do I do when I take my child outside?

When we breathe our nose warms and filters our air. Cover the tracheotomy tube with a scarf, blanket or loose clothing in the cold weather. Avoid irritants like dust, smoke and powders.

Can my child play like other children?

Your child can play with other children, but it is important to be careful that other children do not touch the tracheotomy tube. Care must be given to avoid toys with small parts, so the child does not place them in the tracheotomy tube. Avoid sandboxes.



Who can watch (babysit) my child?

Only people who have learned all the care of your child's tracheotomy can be left to watch your child.

Can I take my child outside and on trips?

Yes. Remember that when you take your child places, you must carry your emergency equipment (travel kit). If your child should have a problem with his/her tracheotomy, you need to have that equipment with you. (See page 32 Emergency Kit)

Does my child need his/her heart monitor all the time?

No, not all the time. The heart monitor **MUST** be used anytime your child is sleeping. This is very important, if your child's tracheotomy tube becomes plugged with mucous the monitor will alarm. This is a signal that your child needs help. Never stop using the monitor. Please call your Ear, Nose and Throat doctor if you are having problems with using the monitor.

When to Call the Ear, Nose and Throat (ENT) Doctor

If you have any concerns about your child's breathing or the child's tracheotomy tube, call your ENT doctor. It is safer to call even if you are unsure whether it is necessary or not.

If you see the following in your child:

1. Changes in your child's breathing

- If your child is restless for no known reason.
 - This may be a sign your child is not getting the oxygen he/she needs.
- A change in your child's breathing pattern.
 - Is your child breathing faster or harder than he/she usually does?
- A change in the sounds your child makes with breathing.
 - Is your child wheezing or sounding more congested?
- A change in your child's color from pink to pale, grey or blue.
- A change in the secretions from the tracheotomy tube.
 - Are the secretions yellow or green?
 - Do the secretions have a foul odor?
 - Do you have to suction your child more often?
 - Are the secretions thicker?

2. Food or formula coming out of the tracheotomy tube.

3. Fresh blood or old dark blood when you suction your child's tracheotomy tube.

4. Occasional blood-tinged secretions may occur if you suction too deep or if there is not enough moisture for your child's tracheotomy. Blood-tinged secretions can also mean too frequent or too vigorous suctioning, or it may be a sign of infection. If blood-tinged secretions continue for several hours or the amount of blood in the mucous tissue increases despite suctioning the child's tracheotomy tube approximately one inch, you should call your ENT doctor.

5. The area around the tracheotomy tube (the stoma) is red or draining.

If you have any difficulty inserting a clean tracheotomy tube when you change the tube weekly, call your ENT doctor

YOUR ENT DOCTOR IS:

TELEPHONE NUMBERS:

Daytime: _____

Nighttime: _____

If your child is ever seen in the Emergency Room:

- **Let the Emergency Room doctors know who your Ear, Nose and Throat doctor is.**

*If your child is ever admitted to the hospital for any reason,
please call your ENT Doctor and let them know.*

Getting Ready for Discharge

Notify your electrical power company:

Let your electric company know you have a child at home that needs electrical medical equipment. This will allow the power company to place you on a high priority list for service should a power failure occur.

If you need a letter, please let your ENT doctor know.

Notify your telephone service:

It is very important that you have a means of calling for help should an emergency occur with your child. Let your telephone company know your child has a tracheotomy and it is necessary to be able to have a means to call for help. Should a telephone failure occur in your area, the telephone company will place you on a high priority list for emergency service.

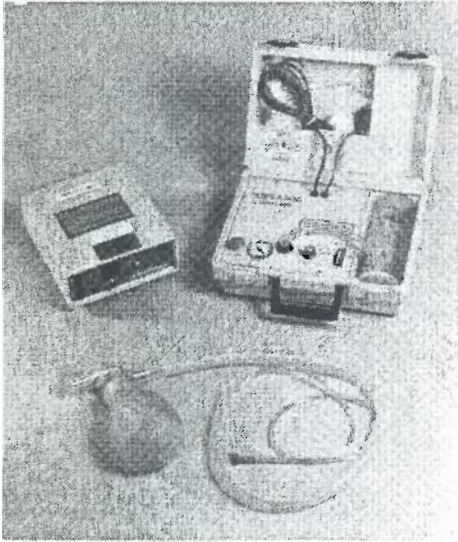
If you need a letter, please let your ENT doctor know.

Tracheotomy Care:

Equipment needed for your child's tracheotomy care should be readily available in an area provided for the child. The equipment should have plenty of space so it is easily accessible. Be sure that important telephone numbers including the medical equipment company (the vendor) is visible. Upon discharge from the hospital, it is your responsibility to keep track of your supplies and order them when needed.

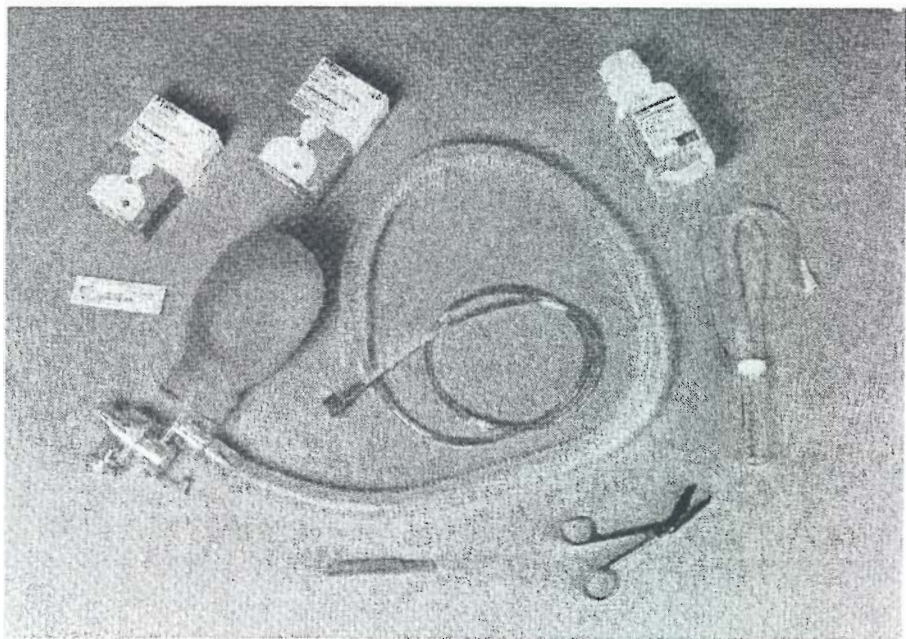
If you have any problems, please let your Ear, Nose and Throat doctor know.

Supplies



- Apnea/Brandycardia Monitor
- Suction Machine
- Ambu Bag

- Dee Lee Catheter
- Tracheotomy Tubes
- Tracheotomy Ties
- Bandage Scissor
- Ambu Bag
- Normal Saline
- Q-tips
- Surgilube



Home Care Agency

This is a company that will provide you with all the supplies and equipment to care for your child's tracheotomy at home. Before the child goes home, all the supplies and equipment will be delivered to your home. As you need more supplies, you must call the company and order them.

If you have any problems with any equipment, call the home care agency. If they are unable to help you please call your Ear, Nose and Throat doctor.

Agency name: _____

Telephone number: _____

Nursing Services

Caring for the child's tracheotomy requires a lot of work and may be scary. Nurses are sometimes recommended to help parents when their child has a tracheotomy at home. Nurses can watch your child at night so parents can sleep. Nurses can also watch your child so you can run errands (such as grocery shopping and banking).

Follow-up Care

Approximately one to two weeks after discharge you will have an appointment to see your child's ENT doctor in the office. This will give you an opportunity to ask any questions or address any concerns about your child and his/her tracheotomy. Further follow-up care will be scheduled at this visit.

Your child will periodically be admitted to the hospital for a direct laryngoscopy and bronchoscopy (DL&B). This is to monitor the airway to help see when it is time for the tracheotomy tube to come out and to watch for other problems from the tube. This is a surgical procedure done in the Operating Room under anesthesia. This procedure allows your ENT doctor to examine the interior of the larynx (voice box), trachea (windpipe) and the bronchi (the part of the body from the trachea to the lungs). Your ENT doctor will talk to you after the surgery and let you know what he/she has found in the examination of your child's larynx, trachea and bronchi.

Your child will probably be able to go home the same day as the procedure.

Emergency Kit/Travel Kit

Your child must have certain supplies with him/her at all times should an emergency arise.

1. Tracheotomy tube

- Open the package.
- Place the obturator size your child is wearing in the tube.

2. Tracheotomy tube

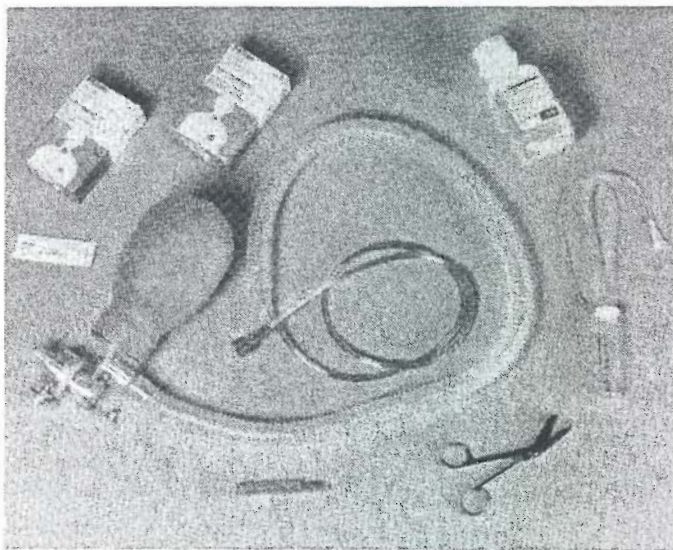
- Next smaller size.

3. Scissors

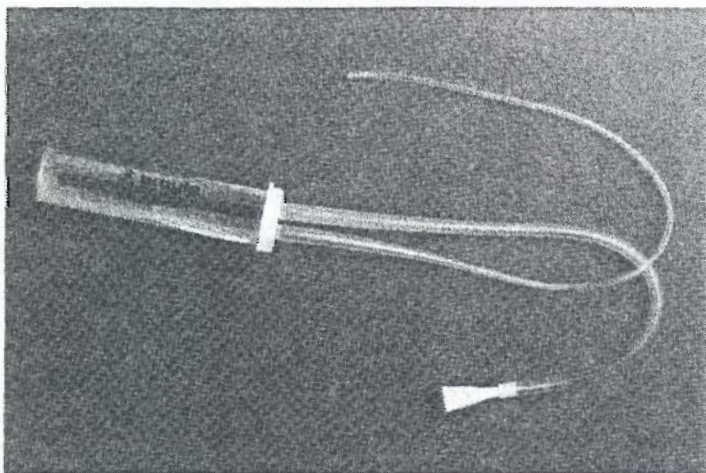
4. Normal saline

5. Lubricating jelly

6. Dee Lee suction catheter and bulb syringe.



Dee Lee Suction Catheter



This kit must be with your child *anywhere* he/she goes, to the doctors, visiting, even in the yard

If your child's tracheotomy tube plugs, you must be able to change it immediately.

Important Telephone Numbers

Pediatrician: _____

Ear, Nose & Throat Doctor: _____

Children's Hospital: _____

Rescue Squad: _____

Power Company: _____

**Equipment/Tracheotomy
Supply Company:** _____

Important Information About My Child

My Child's Diagnosis: _____

Tracheotomy Type: _____

Tube Size: _____