

Advantages of the Dolphin BT™

Reduced Risk of Trauma

- The Dolphin BT eliminates the need to incise or resect tracheal rings.
- Radial dilation enables more control during insertion and minimizes the risk of trauma to the anterior tracheal wall and surrounding structures.
- Radial dilation improves the preservation of tissue elasticity for more secure tracheostomy tube placement, which helps prevent airway leakage, accidental dislodgement, and bleeding.

Efficiency

- The simple, one-step device decreases procedure time (3 minutes for balloon-assisted tracheostomy [BAT] versus 21 minutes for open tracheostomy site).^{4,5}
- A comprehensive procedural tray contains all necessary components for performing a successful BAT.

Bedside Procedure

- Dolphin BT eliminates lag time associated with waiting for an operating room.
- It prevents safety risks to critically ill patients during transport.
- It minimizes overall expenses for the hospital.^{1,2,3}



Tray Components



Dolphin BT™

CIAGLIA BALLOON-ASSISTED TRACHEOSTOMY INTRODUCER

Used for the controlled elective subcricoid insertion of a tracheostomy tube.

The Dolphin BT Tracheostomy Tray includes the following components:

- Dolphin BT tracheostomy introducer
- Cook Sphere® Inflation Device
- Wire guide with positioning marks
- 14.0 Fr dilator
- Disposable #15 safety scalpel
- Curved mosquito clamps
- 5" stainless steel curved hemostat
- 18 gage introducer EchoTip® needle
- 18 gage disposable PTFE catheter introducer needle
- 22 gage disposable infiltration needle
- 25 gage disposable infiltration needle
- Tinted Chloraprep® One-Step (2)
- 5 mL vial of lidocaine epinephrine 1.5% (2)
- Double-swivel connector
- Suture with needle
- Disposable syringes
- 36" x 48" drape with a clear plastic window
- Lubricated jelly
- Gauze sponges
- Filter straw
- Tracheostomy tube holder
- Drain sponges
- Needle holder cup
- Tyvek tape measure
- CSR wrap 30" x 30"

The tray is also available in a version with a sterile tracheostomy tube.

Set Components



Dolphin BT™

CIAGLIA BALLOON-ASSISTED TRACHEOSTOMY INTRODUCER

Used for the controlled elective subcricoid insertion of a tracheostomy tube.

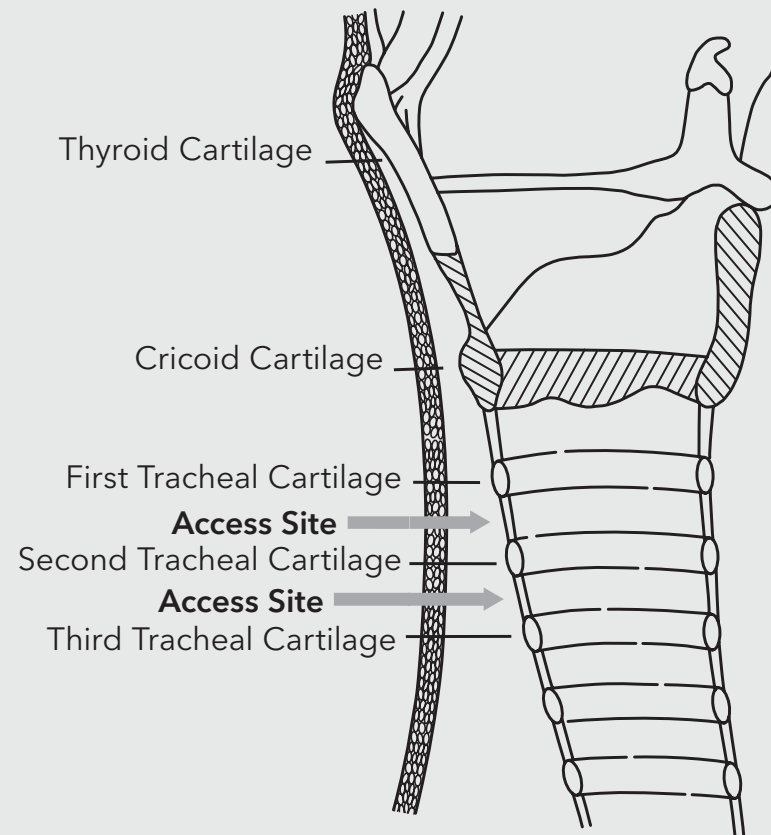
The Dolphin BT Tracheostomy Set includes the following components:

- Dolphin BT tracheostomy introducer
- Cook Sphere® Inflation Device
- 18 gage introducer EchoTip® needle
- 18 gage disposable PTFE catheter introducer needle
- Wire guide with positioning marks
- 14.0 Fr dilator
- Disposable #15 safety scalpel
- 5" stainless steel curved hemostat
- Disposable syringe
- 36" x 48" drape with a clear plastic window
- Lubricated jelly
- Gauze sponges
- Needle holder cup
- Tyvek tape measure
- CSR wrap 30" x 30"

The set is also available in a version with a sterile tracheostomy tube.

Upper Airway Anatomy

The ideal access point is between either the first and second or the second and third tracheal cartilages.



Indications/Contraindications*

Indications

The Dolphin BT™ Ciaglia Balloon-Assisted Tracheostomy Introducer is intended for controlled, elective subcricoid insertion of a tracheostomy tube.

Contraindications

- Emergency tracheostomy tube placement
- Pediatric applications
- Patients with enlarged thyroids
- Nonpalpable cricoid cartilage
- Nonintubated patients
- PEEP (Positive End Expiratory Pressure) value greater than or equal to 20 cm H₂O
- Uncorrected coagulopathy



* For complete instructions, contraindications, warnings, and precautions, see the Instructions for Use that are included with the product.

Preparation (Abbreviated)*

1. Monitor continuous pulse oximetry, airway pressures, and exhaled tidal volumes to ensure adequate ventilation.
2. Place the patient in tracheostomy position and place a pillow under the shoulders to permit full extension of the head and the neck.
3. Prep and drape the anterior neck area.
4. Prepare the Cook Sphere® Inflation Device (CID) in the standard manner and purge to remove air from the device and tubing. Fill the device with a minimum of 20 mL of sterile saline.
5. Generously lubricate the loading dilator and then load the tracheostomy tube.
6. Ensure that all tubing connections on the balloon catheter are tight. Attach the prepared CID to the balloon port on the balloon catheter assembly.
7. Engage the lock lever by moving it to the right in order to prevent inadvertent balloon inflation.



Cook Sphere® Inflation Device

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BAT Procedure (Abbreviated)*



Fig. 1

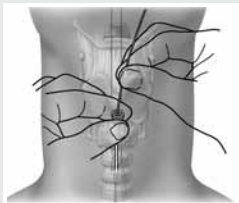


Fig. 2



Fig. 3

1. Palpate landmark structures to ascertain the proper location for tracheostomy tube placement.
2. Make a 2 cm skin incision over the intended site of tracheostomy tube placement.
3. Make a puncture in the trachea with the introducer needle mounted on a partially fluid-filled syringe. Verify entrance into the tracheal lumen by checking for aspiration of air. (Fig. 1)
4. Advance a wire guide through the introducer needle several centimeters into the trachea.
5. Remove the needle while maintaining the wire guide position within the tracheal lumen. (Fig. 2)
6. Advance the short 14.0 Fr dilator over the wire guide and dilate the initial access site using a slight twisting motion.
7. With the balloon fully deflated, advance the balloon catheter and tracheostomy tube assembly as a unit over the wire guide. (Fig. 3)



Fig. 4



Fig. 5

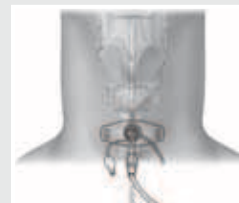


Fig. 6

8. Inflate the balloon, maintaining a maximum inflation pressure of 11 atm for 10-20 seconds. (Fig. 4)
9. Deflate the balloon until all infused saline is withdrawn, and advance the deflated balloon catheter assembly as a unit into the trachea. (Fig. 5)
10. Advance the tracheostomy tube to its flange. (Fig. 6) Once the tube is in place, slowly remove the balloon catheter assembly. Connect the tube to the ventilator and inflate the cuff.

* For complete instructions, contraindications, warnings, and precautions, see the Instructions for Use that are included with the product.

References

1. Cobean R, Beals M, Moss C, et al. Percutaneous dilatational tracheostomy. A safe, cost-effective bedside procedure. *Arch Surg.* 1996;131(3):265-271.
2. Freeman BD, Isabella K, Cobb JP, et al. A prospective, randomized study comparing percutaneous with surgical tracheostomy in critically ill patients. *Crit Care Med.* 2001;29(5):926-930.
3. Bowen CP, Whitney LR, Truitt JD, et al. Comparison of safety and cost of percutaneous versus surgical tracheostomy. *Am Surg.* 2001;67(1):54-60.
4. Blankenship DR, Gourin CG, Davis WB, et al. Percutaneous tracheostomy: don't beat them, join them. *Laryngoscope.* 2004;114(9):1517-1521.
5. Gromann TW, Birkelbach O, Hetzer R. Ballon dilatational tracheostomy. Technique and first clinical experience with the Ciaglia Blue Dolphin method [in German]. *Chirurg.* 2009;80(7):622-627.