

It is a lifesaving technique that provides an opening in the cricothyroid membrane to gain access to the trachea and is the last effort rescue technique for the failed airway in patients over 10 years of age. Three major alternatives have been described:

- 1) Percutaneous without skin incision and usually reserved for transtracheal jet-ventilation.
- 2) Percutaneous dilational (over-the-wire Seldinger technique) to introduce a tracheostomy tube that allows conventional ventilation.
- 3) Open dilational cricothyroidotomy (as described above but without the over-the-wire technique).

It is recommended that every airway practitioner becomes familiar with the contents and use of commercially available devices such as the Melker by Cook Critical Care or other available kits.

Because the majority of practitioners are familiar with the Seldinger (over-the-wire) technique for vascular access, I feel more comfortable with the percutaneous technique than with the open technique and will describe the recommended procedure for it: The steps are as follows:

- 1-Identify the external landmarks.
- 2-Clean the neck with antiseptic solution.
- 3-Introduce needle through the Cricothyroid membrane in a caudally

angled direction. To confirm entry into the trachea have the syringe filled with saline so that once entry occurs there will be bubbling of the saline upon aspiration.

4-Introduce the guidewire into the needle in the same caudal direction as the needle. Once inside remove the needle.

5-Make a vertical incision in the neck of 1 cm. Some recommend making this incision even before the needle is inserted.

6-Introduce the airway and dilator and then remove the dilator and wire in one motion and confirm you have ventilation.

In my opinion the technique should be practiced on a simulator at least once a year in order for it to be successful when confronted with a failed airway.