



Technology

Tracheostomy aspiration suction tube for management of tracheostomized patients with co-existing dysphagia

Inventor

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Key Features

- Allows aspirated material to be collected and removed from patient before entering the lungs
- Reduces discomfort in patients on a ventilator
- Reduces need for short-term or long-term alternative feeding methods
- Provides a valuable screening tool for determining the need for modified barium swallow study

Stage of Development

Reduced to practice with prototypes developed

Keywords

- Medical device
- Tracheotomy
 - Dysphagia

Patent Status

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Tracheostomy Aspiration Suction Tube (VA Reference No. 03-035)

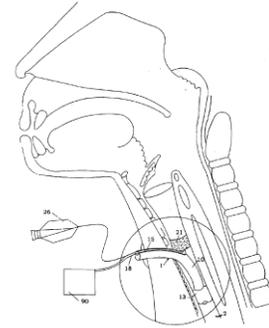
Novel tracheostomy aspiration suction tube for management of tracheostomized patients with co-existing dysphagia

Technology

The Department of Veterans Affairs has developed a tracheostomy aspiration suction tube (TAST) for management of tracheostomized patients with co-existing dysphagia allowing aspirated material to be collected and removed from the patient prior to traveling toward the lungs.

Description

The TAST developed by the VA is similar to a traditional trachea tube in that it includes a curved plastic tube or a primary or outer cannula, which provides a patent airway for inhalation and exhalation. The TAST utilizes a primary cannula as a passageway for air to the patient's lungs, while also providing an insertion cannula capable of receiving an inflatable collection receptacle to be placed below the vocal cords. Upon inflation, the collection receptacle forms a seal with the patient's trachea, which effectively catches any aspirated material. Attached to the collection receptacle is a drainage tube connected to an external suction device. The aspirated material is suctioned out of the collection receptacle and away from the patient.



Competitive Advantage

The function of the TAST differs from a traditional cuffed trachea tube in that it is designed to collect and drain aspirated material from the trachea via the trachea tube.

This invention:

- Has a drainage cuff that can be easily removed and cleaned.
- Eliminates the need for the traditional cuff surrounding the distal end of the primary cannula for patients on a ventilator, thereby reducing patient discomfort.
- Reduces the need for short-term or long-term alternative feeding methods.
- Provides a valuable screening tool for determining the need for a modified barium swallow study.

Status

The Department of Veterans Affairs is looking for a partner for further development and commercialization of this technology through a license, and the VA inventors are available to collaborate with interested companies through a Cooperative Research and Development Agreement (CRADA).