

A tracheotomy is a surgical procedure which consists of making an incision on the anterior aspect of the neck and opening a direct airway through an incision in the trachea (windpipe). As with any surgery, there are some risks associated with tracheotomies. Early Complications that may arise during the tracheostomy procedure or soon thereafter include bleeding, pneumothorax, and subcutaneous emphysema. The aim of this study was to evaluate the use of cautery knife instead of artery forceps in management of thyroid isthmus during tracheostomy with regard to time of operation, post-operative bleeding, and surgical emphysema.

This study was a cross-sectional research performed on 60 ICU patients in need of tracheostomy through a period started from January 2009 to January 2012. The patients were divided into two groups each formed of 30 patients, one group (group A) dealt with by traditional tracheostomy through clamping of the thyroid by artery forceps and transfixion to expose tracheal rings, and second group (group B) had a new method of management through cautery knife. Time of both procedures and early complications were registered in questionnaires and the data were analyzed for both groups.

A tracheostomy was performed in 60 morbidly ICU patients. The two groups had no significant difference in age, sex, and vital signs. Average duration of the procedure was 10-20 minutes in group A patients using the traditional procedure and 5-10 minutes in the second group (group B) using a cautery knife. Three patients out of thirty in group A got post-operative bleeding, while no patient in group B got bleeding. There was a significant difference between the two groups regarding time of procedure and post-operative bleeding, otherwise there was no significant differences between the two groups regarding occurrence of surgical emphysema. The use of cautery knife for thyroid isthmus management during tracheostomy minimize operation time and reduce occurrence of postoperative complication especially bleeding.