



شبكة المعلومات الجامعية
التوثيق الإلكتروني والميكروفيلم

بسم الله الرحمن الرحيم



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شبكة المعلومات الجامعية التوثيق الإلكتروني والميكروفيلم



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جامعة عين شمس

التوثيق الإلكتروني والميكروفيلم

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Ultrasound Guided Percutaneous Tracheostomy versus Conventional Tracheostomy; Technique and Outcome

Thesis

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بِسْمِ اللَّهِ الرَّحْمَنِ الرَّحِيمِ

قالوا

سبحانك لا علم لنا
إلا ما علمتنا إنك أنت
العليم العظيم

صدق الله العظيم

سورة البقرة الآية: ٣٢

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List of Abbreviations

Abb.	Full term
ABP.....	Arterial Blood Pressure
APACHE	Acute Physiology And Chronic Health Evaluation
BC	Before Christ
BDT	Balloon Dilation Tracheostomy
BP	Blood Pressure
COPD.....	Chronic Obstructive Pulmonary Disease
CT	Computed Tomographic
DM	Diabetes Mellitus
ECG	Electrocardiogram
ET	Eustachian Tube
ETCO2.....	End Tidal Carbon Dioxide
ETT	Endotracheal Tube
FiO2	Fraction of Inspired Oxygen
GCS.....	Glasgow Coma Scale
GWT	Guidewire Dilating Forceps Tracheostomy
HTN	Hypertension
ICU	Intensive Care Unit
INR	International Normalized Ratio
IV	Intravenous
LMA.....	Laryngeal Mask Airway
MAP	Mitogen-Activated Protein
MAP.....	Mean Arterial Blood Pressure
MDT.....	Multiple Dilator Tracheostomy
MV	Mechanical Ventilation
OST	Open Surgical Tracheotomy

List of Abbreviations Cont...

Abb.	Full term
PaO2	Pressure Of Arterial Oxygen
PCDT	Pharmacomechanical Catheter Directed Thrombolysis
PDT.....	Percutaneous Dilatation Tracheostomy
PEEP	Positive End-Expiratory Pressure
RDT	Rotational Dilation Tracheostomy
RT	Rotational Technique
S.D.	Standard Deviation
SSDT	Single-Step Dilation Tracheostomy
STD.....	Single Tapered Dilator
TIF	Tracheo-Innominate Artery Fistula
TLT	Translaryngeal Tracheostomy
US	Ultrasound
VAP.....	Ventilator-Associated Pneumonia

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INTRODUCTION

Tracheostomy is not a new medical procedure. It has been reported to have been performed as early as 3600 before Christ (BC) based on Egyptian artifacts. In the 4th century BC, Alexander the Great was given credit for saving a soldier's life by using the tip of his sword to create an opening in the neck (*Szmuk et al., 2008*).

It is a procedure that has evolved over many hundreds of years. In the 21st century, the majority of tracheostomies are now inserted by the intensivists in the intensive care unit (ICU) (*Avery and Jankowski, 2021*).

As a consequence, the incidence of tracheostomy in the critical care population is increasing. The emergence of percutaneous tracheostomy has further increased the number of tracheostomies performed and encouraged their use earlier in the course of an ICU stay. Some of the advantages over surgical tracheostomies are better resource utilization, cost savings, quicker time to perform and decreased risk of procedural complications (*Pandian et al., 2019*).

Prolonged mechanical ventilation is associated with prolonged stays in the (ICU), higher costs, and increased morbidity and mortality (*Loss et al., 2015*).