شبكة المعلومات الجامعية

التوثيق الإلكتروني والميكروفيلم

بسم الله الرحمن الرحيم

HANAA ALY

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جامعة عين شمس

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قسم

نقسم بالله العظيم أن المادة التي تم توثيقها وتسجيلها
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تحفظ هذه الأقراص المدمجة بعيدا عن الغبار

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Muscle wasting assessed by ultrasound versus scoring systems as early predictor of outcomes of intensive care unit stay in critically ill patients

Thesis

Submitted for Partial Fulfilment of the Master Degree in Intensive Care

By

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Amr Badawy Mahmoud Badawy Elkolfat

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List of Abbreviations

Abb.	Full term

λ ..... Wave length
ABG..... Arterial blood gases
APACHE II ..... Acute Physiology and Chronic Health Evaluation
CKD…… Chronic kidney disease
CIM ..... Critical illness myopathy
CINM ..... Critical illness neuromyopathy
CIP ..... Critical illness polyneuropathy
CMAP ..... Compound muscle action potential
CNS ..... Central nervous system
COPD ..... Chronic Obstructive Pulmonary disease
CSA ..... Cross-sectional area
CT..... Computed tomography
CVS ..... Cerebrovascular strokes
DD..... Diaphragmatic dysfunction
DE..... Diaphragmatic excursion
DFI ..... Diabetic foot infection
DM..... Diabetes mellitus
DMVD..... Duration of mechanical ventilation in days
DMVP ..... Duration of mechanical ventilation in percent
DTF ..... Diaphragmatic thickness fraction
EEDT ..... Diaphragmatic thickness in end-expiration
EIDT..... Diaphragmatic thickness in end-inspiration
Fig..... Figure
FiO_2 ..... Fraction of inspired oxygen
GCS ..... Glasgow Coma Scale
GIT..... Gastrointestinal hemorrhage
H&N..... Head and neck
HCO_3..... Mean arterial bicarbonate concentration
HI..... Hypoxemia index
HR ..... Heart rate

List of Abbreviations Cont...

Abb.	Full term
ICU	Intensive care unit
ICUAW	Intensive care unit acquired weakness
K	Potassium
LODS	Logistic Organ Dysfunction Score
MODS	Multiple Organ Dysfunction Score
MPM	Mortality Probability Model
MR	Magnetic resonance
MV	Mechanical ventilation
Na^+	Sodium
NPV	Negative predictive value
O_2	Oxygen
$PaCO_2$	Partial pressure of carbon dioxide
PaO_2	Partial pressure of oxygen
PMV	Prolonged mechanical ventilation
PPV	Positive predictive value
QMT	Quadriceps muscle thickness
RFCSA	Rectus femoris cross sectional area
ROC	Receiver operating characteristic
SBT	Spontaneous breath trial
SOFA	Sequential Organ Failure Assessment
Temp	Temperature
US	Ultrasound
UTI	Urinary tract infection
VAFP	Vasoactive agent free period
VAP	Ventilator acquired pneumonia
VI	Vastus intermediusmuscle
WBC	White blood cells
WHO	World Health Organization

INTRODUCTION

Although there was an increase in the severity index of critical illnesses from the last century to the new one, the mortality had relatively decreased 35% from 1988 to 2012 with increase in discharge to other health care facilities instead of home.

Disease specific mortality decrease was mostly noticed in cases of decompensated heart failure followed by community acquired pneumonia, subarachnoid hemorrhage ***(Zimmerman et al., 2006).***

This increases the need for efficient mortality prediction tools.

Mortality prediction scores are abundant they are either disease-specific (e.g., CURB score for pneumonia) or general (e.g., APACHE score), yet physician estimates might be more sensitive than the mortality prediction scores.

Available scores are numerous, the most famous are:

1. APACHE II (Acute Physiology and Chronic Health Evaluation) score presented in 1985 and being used till now ***(Salluh and Soares, 2014).***
2. SOFA (Sequential Organ Failure Assessment ***(Sawicka et al., 2014).***
3. SAPS II (Simplified Acute Physiology Score).