



Faculty of Medicine  
Ain shams universtay

# **Diaphragmatic pacemakers**

*Essay*

*Submitted for Partial Fulfillment of Master  
Degree in Intensive Care*

*Presented By*

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Ain Shams University**

**2013**

الرحيم

الله

قَالُوا سُبْحَانَكَ لَا عِلْمَ لَنَا إِلَّا مَا  
عَلَّمْتَنَا إِنَّكَ أَنْتَ الْعَلِيمُ  
الْحَكِيمُ

صدق الله العظيم  
سورة البقرة آية ( )

بِسْمِ اللَّهِ الرَّحْمَنِ الرَّحِيمِ

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صدق الله العظيم

سورة البقرة آية (٣٢)



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***Mustafa Mohamed Mokhtar Ezzeldin***

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## List of Abbreviations

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ADLs	:	Activities of daily living
ALS	:	Amyotrophic lateral sclerosis
CCHS	:	Congenital central hypoventilation syndrome
CPAP	:	Continuous positive airway pressure
DP	:	Diaphragmatic pacemaker
DPS	:	Diaphragm Pacing Stimulation (System)
EPG	:	External pulse generator
FEV1	:	Forced Expiratory Volume in the first second
FVC	:	Forced vital capacity
GI	:	Gastrointestinal
IC	:	Inspiratory capacity
ICU	:	Intensive care unit
IDE	:	Investigational device exemption
LMN	:	Lower motor neurone
MND	:	Motor neurone disease
MV	:	Mechanical ventilation
Non-REM	:	Non-Rapid eye movement
NPPV	:	Noninvasive Positive Pressure Ventilation
SCI	:	Spinal cord injury
SL	:	Spinal lesion
TLC	:	Total lung capacity
UH	:	University Hospitals
UMN	:	Upper motor neurone
VA	:	Veterans affairs

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