USE OF B-TYPE NATRIURETIC PEPTIDE IN THE EVALUATION AND MANAGEMENT OF ACUTE DYSPNEA

Thesis

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Pediatrics

By

Ala'a Mahmoud Nawar

M.B.B.Ch,

Ain Shams University, Faculty of Medicine

Under Supervision Of

Professor/ Magda Yahia Al-Seify

Professor of Pediatrics

Faculty of Medicine, Ain Shams University

Doctor/ Mervat Gamal Eldin Mansour

Lecture of Pediatrics

Faculty of Medicine, Ain Shams University

Doctor/ Sherien Ahmed Samy El-Masry

Lecture of Clinical Pathology

Faculty of Medicine, Ain Shams University

Faculty of Medicine

Ain Shams University

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إستخدام الجزء النيتروجيني من الهرمون الأولي للبتيد المدرّ للصوديوم في البول نوع بي في تقييم وعلاج حالات صعوبة التنفس

رسالة

توطئة للحصول على درجة الماجستير فى
طب الأطفال

مقدمة من

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بكالوريوس الطب والجراحة

تحت إشراف

أ.د./ ماجدة يحيى الصيفي
أستاذ طب الأطفال - كلية الطب - جامعة عين شمس

د./ ميرفت جمال الدين منصور
مدرس طب الأطفال - كلية الطب - جامعة عين شمس

د./ شيرين أحمد سامى المصرى
مدرس الباثولوجيا الإكلينيكية - كلية الطب - جامعة عين شمس

كلية الطب
جامعة عين شمس
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SUMMARY

Acute dyspnea is uncomfortable breathing occur within 24hours to 48hours in children but it is difficult to diagnosed as it has many causes.

Etiology of acute dyspnea can differentiated into cardiac, pulmonary and other causes as cardiac causes are more dangerous than others. Sometimes acute dyspnea may be mixed between cardiac and pulmonary this are more dangerous.

Management of acute dyspnea may be delayed until we reach the final diagnosis so we need rapid investigation to diagnose acute dyspnea.

B-type natriuretic peptide is laboratory investigation and is a cardiac neurohormone secreted from the ventricles in response to volume expansion and pressure overloads which can differentiate the causes of acute dyspnea into cardiac and non-cardiac causes fast enough to improve outcomes of patients and cost.

In our study, we measured BNP to 35 patients with acute dyspnea admitted to emergency room

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إهداء
إلـــى روح والـــدى العزيـــز
محمود محمد أمين نوّار
و والدتى العزيزة
فاطمة

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List of Abbreviations

BNP	B-type natriuretic peptide
CHF	congestive heart failure
SOB	shortness of breath
CNP	C-type natriuretic peptide
NP	natriuretic peptide
RAAS	Renin-angiotensin-aldosterone system
ESRD	End-stage renal disease
NYHA	New York Heart Association Functional Classification
NEP	Neutral end peptidase
NPRs	Nutrient peptide receptors
LVH	Left ventricular hypertension
AGE1	Angiotensin converting enzyme inhibitors
LV	Left ventricular
AMP	Adenosine monophosphate
NPR-A	3',5 monophosphate-coupled receptor
CHF	Congestive heart failure
SOB	Shortness breath
CHD	Congenital heart disease
PE	Pulmonary embolism
SV	Stroke volume
EDV	End diastolic volume
EF	Ejection fraction

List of Abbreviations

ECG	Electrocardiogram
CT	Computed tomography
MRI	Magnetic resonance imaging
PT	prothrombin time
aPTT	Activated partial thromboplstin time
TT	thromboplastin time
PTP	Low pre-test probability
LVADs	Left ventricular assist devices
NIPPV	Noninvasive positive pressure ventilation
AICD	Automatic implantable cardio Venter
CPAP	Continuous positive airway pressure
VPAP	Variable positive airway pressure
PEEP	positive end expiratory pressure
PSP	Primary spontaneous pneumothorax
SSP	Secondary spontaneous pneumothorax
NAEPP	National assume education and prevention program
LDH	Lactate dehydrogenase
SABA	Short acting beta$_2$-adenoreceptor against
LABA	Long acting beta agonists
MDL	Metered-dose inhalers
RBCs	Red blood cells
HBO	Hyperbaric oxygen
RR	Respiratory rate
HR	Heart rate