بسم الله الرحمن الرحيم

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تم رفع هذه الرسالة بواسطة / مني مغربي أحمد

بقسم التوثيق الإلكتروني بمركز الشبكات وتكنولوجيا المعلومات دون أدنى مسئولية عن محتوى هذه الرسالة.

ملاحظات: لا يوجد

Frequency of Non-Thyroidal Illness Syndrome in Pediatric Patients with Sepsis and Septic Shock

Thesis

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Dedication

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List of Abbreviations

Abb.	Full term
ALT	Alanine aminotransferase
ARDS	Acute respiratory distress syndrome
AST	Aspartate aminotransferase
AUC	Area under curve
CBC	Complete blood count
CRP	C-reactive protein
DVT	Deep vein thrombosis
ECMO	Extracorporeal membrane oxygenation
ELISA	Enzyme Linked Immunosorbent Assay
ESS	Euthyroid Sick Syndrome
FiO2	Fraction of inspired oxygen
FT3	Free triiodothyronine
FT4	Free Thyroxine
GRV	Gastric residual volumes
HB	Hemoglobin level
HBP	Heparin binding protein
HIV	Human immunodeficiency virus
IL6	Interleukin 6
iNO	Nitric Oxide, Inhalational
IVIG	Intravenous immune globulin
LPS	Lipopolysaccharide
LT3	Liothyronine
LT4	Levothyroxine
MAP	Mean arterial pressure

List of Abbreviations Cont...

Abb.	Full term
MCP	Monocyte chemoattractant protein
MCT	Monocarboxylate transporter
mRNA	Messenger RNA
NEFA	Non-Esterified Fatty Acids
NFκB	Nuclear factor kappa B
NIS	Na-iodine symporter
NTIS	Nonthyroidal illness syndrome
NTIS	Non-Thyroidal Illness Syndrome
OATP1C1	Organic anion-transporting polypeptide 1C1
PaCO2	Partial pressure of carbon dioxide
PaO2	Partial pressure of oxygen
PaO2/fiO2	Partial pressure of oxygen to fractional oxygen content
PARDS	Pediatric acute respiratory distress syndrome
PCT	Procalcitonin
PEEP	Positive end-expiratory pressure
PICU	Pediatric intensive care unit
PLT	Platelet
pSOFA	Pediatric sequential sepsis related organ failure assessment score
ROC	Receiver operating characteristic curve
rT3	Reverse T3
sIL-2R	Soluble interleukin-2 receptor
SOFA score	Sequential Organ Failure Assessment score

List of Abbreviations Cont...

Abb.	Full term
Spo2	Peripheral arterial oxygen saturation
TAMOF	Thrombocytopenia-associated multiple organ failure
TBG	Thyroid-binding globulin
TLC	Total Leucocytic count
TNF- α	Tumor necrosis factor-α
TPO	Thyroid peroxidase
TSH	Thyroid stimulating hormone
VA	Veno-arterial
VBG	Venous blood gases
VDD	Vitamin D deficiency
VV	Veno-venous

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INTRODUCTION

Sepsis is defined as life-threatening organ dysfunction caused by a dysregulated host response to infection and "septic shock" the subset of sepsis with circulatory an cellular/metabolic dysfunction associated with a higher risk of mortality ***(Weiss et al., 2020)***, Determination of an acute prognosis in the early stage of sepsis and septic shock is of great importance to aid in the development of adapted strategies and improve patient outcomes***(Investigators, 2017)***. Many studies have been devoted to biomarkers and clinical scores that could evaluate the severity and prognosis of patients with septic shock; however, none of them are widely used clinically***(Liu et al., 2019)***. Thus, new biomarkers for reliable early prognosis are still urgently needed.

Pediatric Patients suffering from critical illnesses who require treatment in pediatric intensive care unit (PICU) present with alterations in circulating thyroid hormone levels that are referred to with several names such as Non-Thyroidal Illness Syndrome (NTIS), Euthyroid Sick Syndrome (ESS) also known as the low T3 syndrome. NTIS demonstrate abnormal thyroid functions (low serum FT3 and TT3, high rT3, normal or mildly increased FT4 and TT4, and normal or low TSH concentrations. In severe cases, the TT4 and FT4 concentrations might be low and that of TSH normal) ***(Feng et al., 2020; Langouche et al., 2019)***.