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
علي هذه الأقراص المدمجة قد أعدت دون أية تغيرات

يجب أن

تحفظ هذه الأقراص المدمجة بعيدا عن الغبار

HANAA ALY

Evaluation of Nutritional Status As a prognostic Indicator for the Outcome in Liver Transplant Recipients

Thesis

Submitted for partial fulfillment of 'Master degree' in
General Intensive Care

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List of Abbreviations

AIDS	**A**cquired **I**mmunodeficiency **S**yndrome
ALT	**A**lanine **T**ransaminase
AST	**A**spartate **T**ransferase
BCM	**B**ody **C**ell **M**ass
BIA	**B**ioelectric **I**mpedance **A**nalysis
BMD	**B**one **M**ineral **D**ensity
BMI	**B**ody **M**ass **I**ndex
BUN	**B**lood **U**rea **N**itrogen
CD	**C**luster of **D**ifferentiation
CLD	**C**hronic **L**iver **D**isease
CPP	**C**entral **P**erfusion **P**ressure
CRP	**C R**eactive **P**rotein
D. bilirubin	**D**irect **b**ilirubin
DEXA	**D**ual-**E**nergy **X**-ray **A**bsorptiometry
DKA	**D**iabetic **K**eto-**A**cidosis
DM	**D**iabetes **M**ellitus
ESLD	**E**nd **S**tage **L**iver **D**isease
FFM	**F**at **F**ree **M**ass
GBWR	**G**raft-to-**B**ody **W**eight **R**atio
GI	**G**astro **I**ntestinal
GW	**G**raft's **W**eight
HAT	**H**epatic **A**rtery **T**hrombosis
HCC	**H**epato-**C**ellular **C**arcinoma
HDL	**H**igh **D**ensity **L**ipo-proteins
HIV	**H**uman **I**mmunodeficiency **V**irus
HS	**H**ighly **S**ignificant
HTN	**H**ypertension
ICP	**I**ntra **C**ranial **P**ressure
ICU	**I**ntensive **C**are **U**nit

IGF-1	**I**nsulin-like **G**rowth **F**actor-**1**
IL-10	**I**nter-**L**eukin **10**
INR	**I**nternational **N**ormalized **R**atio
IV	**I**ntra-**V**enous
kg	**K**ilo **G**rams
LCAT	**L**ecithin-**C**holesterol **A**cyl-**T**ransferase
LDL	**L**ow **D**ensity **L**ipo-proteins
LDLT	**L**iving **D**onor **L**iver **T**ransplantation
LST	**L**ean **S**oft **T**issue
LT	**L**iver **T**ransplantation
MAC	**M**id **A**rm **C**ircumference
MAMA	**M**id **A**rm **M**uscle **A**rea
MAMC	**M**id **A**rm **M**uscle **C**ircumference
MCT	**M**edium-**C**hain **T**riglycerides
MHC I	**M**ajor **H**istocompatibility **C**omplex **I**
MV	**M**echanical **V**entilation
NK	**N**atural **K**iller cells
NKT	**N**atural **K**iller **T** cells
NS	**N**on-**S**ignificant
PCT	**P**rocalcitonin
PEM	**P**rotein-**E**nergy **M**alnutrition
PHA	**P**hytohaem-**A**gglutinin
PPC	**P**ostoperative **P**ulmonary **C**omplications
PSC	**P**rimary **S**clerosing **C**holangitis
P-value	**P**robability **V**alue
PVT	**P**ortal **V**ein **T**hrombosis
RBCs	**R**ed **B**lood **C**ell**s**
RBP	**R**etinol-**B**inding-**P**rotein
RW	**R**ecipient's **W**eight
S	**S**ignificant
SD	**S**tandard **D**eviation

SFSS	**S**mall-**F**or-**S**ize **S**yndrome
SGA	**S**ubjective **G**lobal **A**ssessment
SOFA	**S**equential **O**rgan **F**ailure **A**ssessment
T. bilirubin	**T**otal **b**ilirubin
TBK	**T**otal **B**ody **P**otassium
TLC	**T**otal **L**eucocytic **C**ount
TNF	**T**umour **N**ecrosis **F**actor
TSF	**T**riceps **S**kin **F**old
UBW	**U**sual **B**ody **W**eight

Introduction

Liver transplantation is a viable treatment option for end-stage liver disease and acute liver failure. The surgical procedure is very demanding and ranges from 4 to 18 hours depending on outcome. Numerous anastomoses and sutures, and many disconnections and reconnections of abdominal and hepatic tissue, must be made for the transplant to succeed, requiring an eligible recipient and a well-calibrated live or cadaveric donor match. By any standard, hepatic transplantation is a major surgical procedure ***(Francesco, Alberto & Zanetto, 2016).***

Malnutrition is associated with increased morbidity and mortality rates in patients with chronic liver disease. Patients with cirrhosis who are malnourished have a higher rate of hepatic encephalopathy, infection, and variceal bleeding. They are also twice as likely to have refractory ascites. Numerous studies have found a correlation between poor nutritional status and a decreased survival rate. ***(Alberino et al., 2001).***

Nutritional status has a prognostic implication in liver transplant candidates. Malnutrition before transplantation is associated with a higher rate of post-transplant complications, including infection and variceal bleeding. Patients who are severely malnourished require more blood products intra-operatively, stay on ventilatory support longer postoperatively, and have an increased length of hospital stay and a higher incidence of graft failure. Ultimately, patients with poor nutritional status before transplant surgery have a decreased survival rate after liver transplantation ***(Selberg Oet al., 1997).***

Checking all patients with chronic liver disease for nutritional abnormalities can detect those at risk of developing preventable complications. Starting nutritional therapy during all phases of liver transplant has the possibility to decrease the risk of such complications ***(Henkel and Buchman. 2005).***

Aim of the work

The purpose of this study was to determine the impact of nutritional status pre-liver transplant on recipients' course and the outcome post-transplant.