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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HANAA ALY

Impact of Direct Acting Antiviral (DAA) Agents on hematological and hepatic statuses of patients with chronic hemolytic anemias and chronically infected with hepatitis C virus (HCV)

Thesis

Submitted for partial fulfillment of Master Degree in Internal Medicine

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دراسة تأثير مضادات فيروس التهاب الكبد الوبائى ذات التأثير المباشر (DAA)على الحالات الدموية والكبدية لمرضى الأنيميا التكسيرية المزمنةوالمصابين بالإلتهاب الفيروسى سى

رسالة

توطئة للحصول علي درجة الماجستير في الباطنة العامة

مقدمة من

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Ahmed Khamis
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List of Abbreviations

Abb.	:	Full term
AFP	:	Alpha Fetoprotein
AIHA	:	Autoimmune hemolytic anemia
ALT	:	Alanine Transaminase
AST	:	Aspartate Transaminase
ATP	:	Adenosine triphosphate
CBC	:	Complete blood count
CHC	:	Chronic hepatitis C
CS	:	Caesarean section
CTL	:	Cytotoxic T lymphocytes
DAAs	:	Direct acting antivirals
DAT	:	Direct antiglobulin test
DIC	:	Disseminated intravascular coagulation
EDHS	:	Egyptian Demographic Health Survey
EHIS	:	Egyptian Health Issues Survey
ENT1	:	Equilibrative nucleoside transporter 1
EPO	:	Erythropoietin
G6PD	:	Glucose-6-phosphate dehydrogenase
G-CSF	:	Granulocyte colony-stimulating factor
Hb	:	Haemoglobin
HbE	:	Hemoglobin E
HBsAg	:	Hepatitis B surface antigen
HBV	:	Hepatitis B virus
HCC	:	Hepatocellular carcinoma
HCV	:	Hepatitis C virus
HIV	:	Human immunodeficiency virus
HSCT	:	Hematopoietic stem cell transplantation
HUS	:	Hemolytic uremic syndrome

Abb.	:	Full term
IDUs	:	ILLICIT drug users
INF	:	INTERFERON
INR	:	International Normalized Ratio
KAP	:	Knowledge, attitude and practice
LDH	:	Lactate dehydrogenase
LFTs	:	Liver Function Tests
MOC	:	Model of Care
MRR	:	Mortality rate ratios
NAAC	:	National Anaemia Action Council
NCCVH	:	National Committee for Control of Viral Hepatitis
NCI	:	National Cancer Institute
PAT	:	Parenteral antischistosomal treatment
PCR	:	Polymerase Chain Reaction
PegIFN	:	Pegylated interferon-a
PEG-IFN	:	Pegylated-interferon
PT	:	Prothrombin Time
PT/PTT	:	Prothrombin time/partial thromboplastin time
PTT	:	Partial Thromboplastin Time
QoL	:	Quality of life
RAVs	:	Resist anceassociated variants
RBV	:	Ribavirin
SCD	:	Sickle Cell Disease
SDH	:	Social determinants of health
SNP	:	Singlenucleotide polymorphism
SVR	:	Sustained virological response
TE	:	Transient Elastography
TTP	:	Thrombotic thrombocytopenic purpura
WHO	:	World Health Organization

INTRODUCTION

HCV infection is a major clinical problem in patients with chronic hemolytic anemias e.g. Thalassemia, sickle cell patients, spherocytosis ***(Wonke et al., 1990)***. Along with iron overload, it represents a major risk factor for the development of liver fibrosis and eventually cirrhosis in this population ***(Angelucci et al., 2002)***. Various studies have shown a faster progression to severe liver fibrosis in patients with concomitant HCV infection and high liver iron concentrations. The prevalence of cirrhosis in these patients ranges from 10% to 20% ***(Di Marco et al., 2010)***.

Although the overall survival of patients with chronic hemolytic anemias has recently increased due to improvements in iron chelation therapy and the subsequent reduction in cardiac complications, liver-related mortality and morbidity rates have risen because of liver failure and development of hepatocellular carcinoma ***(Voskaridou et al., 2012)***. Therefore, eradication of HCV infection has become a priority in these patients.

Until recently, the only available treatment for HCV infection was the combination of pegylated interferon-(PEG-IFN-a) and ribavirin (RBV), which showed modest efficacy in those populations ***(Casu et al., 2014)***. However, its use was limited by poor tolerance, several contraindications, and concerns about RBV-induced hemolysis and the subsequent increase in transfusion needs ***(Alavian et al., 2010)***.

More recently, IFN-free regimens, based on (DAAs), have been developed, showing greater efficacy and tolerance in patients with chronic HCV infection. According to international guidelines, patients who are transfusion dependent should be treated with these new regimens, preferably those without RBV ***(European et al., 2017)***.