مقارنة بين العلاج الجامع الإنترفيرون المعتاد ألفا مع الريبافيرين و العلاج الجامع الإنترفيرون طويل المفعول مع الريبافيرين في التأثير العلاجى لكل منهما على مرضى الإلتهاب الكبدي الفيروسى (سي) بعد عامين من نهاية العلاج

رسالـــــــة

مقدمة توطئة للحصول على درجة الماجستير في طب المناطق الحارة

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رئيس قسم الجهاز الهضمي و الكبد

مستشفى الشرطة.العجوزة

كلية الطب

جامعة عين شمس

2006

Two years retrospective study for Egyptian hepatitis C patients with sustained response to pegylated versus standard interferon combined therapy

Thesis

Submitted For Partial Fulfillment of
Master Degree in Tropical Medicine

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Acknowledgment

First and foremost thanks to **ALLAH,** the most gracious and mercifull.

I wish heartily to express my deep appreciation and profound gratitude to my **Prof. Dr. Mohamed Fawzy Montaser,** Dean of Faculty of Medicine and Professor of Tropical Medicine, Ain Shams University, for his kind close supervision and encouragement. He has his finger prints in every single piece in this thesis.

Words stand short to express my deep respect and thanks to **Prof. Dr. Mohamed Reda El-Wakil,** Professor of Tropical Medicine, Faculty of Medicine, Ain Shams University, for his continuous encouragement and sincere work which have been the main factors to complete this work**.**

I wish to introduce my deepest gratitude, respect, and cordial thanks to **Brig. Dr. Medhat Hassan El-Sahhar,** Head of Hepatology and Gastro-enterology Department. Police Hospital. Agouza, for his kind care and great assistance throughout this work.

I am also delighted to express my deep gratitude and thanks to all my dear professors, my colleagues and to my family, without their help, this work couldn’t be completed.

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List of Abbreviations

AASLD	American Association for Study of Liver Disease
ALT	Alanine amino transferase
AMA	Anti-mitochondrial antibodies
ANA	Antinuclear antibodies
BMI	Body mass index
CTL	Cytotoxic T cells
EASL	European Association for the Study of the Liver
EIA	Enzyme immunoassay
ELISA	Enzyme linked immunosorbent assay
ETR	End of treatment virological response
EVR	Early virological response
HAI	Histopathology activity index
HBV	Hepatitis B virus
HBsAg	Hepatitis B surface antigen
HCC	Hepatocellular carcinoma
HCV	Hepatitis C virus
HVR	Highly variable regions
HS	Highly significant
IFN	Interferon
Kd	Kilio Daltons
µ	Micrograms
NIH	National Institute of Health
NS	Not significant
ORF	Open-reading frame
PEG	Poly Ethylene Glycols
PCR	Polymerase Chain Reaction
RIBA	Recombinant immunoblot assay
RT	Reverse transcriptase
S	Significant
SD	Standard deviation
SPSS	Statistical Pakage for the Social Sciences
SVR	Sustained virological response
TSH	Thyroid stimulating hormone
WHO	World Health Organization

AIM OF THE STUDY

Is to study the patients who had shown sustained response to pegylated interferon plus ribavirin, patients who hadn't shown sustained response to pegylated interferon plus ribavirin, patients who had shown sustained response to standard interferon plus ribavirin, patients who hadn't shown sustained virological response to standard interferon plus ribavirin, and CHC patients who didn't receive interferon retrospectively to evaluate their clinical, biochemical, and virological parameters through one and half years of follow-up starting from zero point (6 months after end of treatment) to see if there is a sustained and progressive improvement or not.

INTRODUCTION

Since the discovery of HCV and the development of diagnostic tests, almost all of non-A non-B post transfusion hepatitis cases have been shown to be due to HCV infection. HCV has been encountered worldwide with WHO estimates of 170 million infected patients worldwide **(Booth et al., 2001).**

In Egypt, high rates were reported among several population groups including rural residents reaching up to 20% (**Habib et al., 2001 and Tanaka et al., 2004).**

In Egypt, a high homology of HCV genotypes, 90 % of which is accounted for by genotype 4a, strongly suggests a local epidemic of HCV throughout the general population **(Ray et al., 2000).**

The success of HCV in causing persistent infection is probably related to its extremely high mutation rate and its existence as multiple quasi-species, each slightly different in sequence from the other. Many patients have a clinical course characterized by peaks and depressions of clinical and biochemical activity suggesting that HCV is capable of down regulation in order to reduce immune pressure **(Brechot, 1994; Honda et al., 1994).**

Chronic hepatitis C is indolent disease extending over many years. The acute attack is usually unrecognized and has no clinical features which will predict chronicity. Nevertheless, 80% of patients will develop chronic hepatitis and 20% of them will go into cirrhosis.

The course is a slow one, marked by fluctuating transaminases over many years. Each elevation probably represent an episode of HCV viraemia perhaps due to quasispecies **(Koretz et al., 1996).**

Transaminase levels do not predict liver pathology and significant changes can be found with repeatedly normal values Serum HCV RNA is essential for measuring disease activity and monitoring the effects of treatment **(Healey et al., 1995).**

As regard treatment, the common antiviral interferon alpha is used, selection of patient for this treatment is difficult and many factors have to be considered **(Conjeervaram et al., 1995).**

The results with interferon alone were not satisfactory and because of the high mutation rate of the virus, combinations were suggested. Combination with ribavirin was tried, it enhances the antiviral effect of the interferon **(Lau et al., 1994).**