Assessment of Thyroid Functions in Viral Hepatitis

Thesis Submitted for Partial Fulfillment
of Master Degree in Pediatrics

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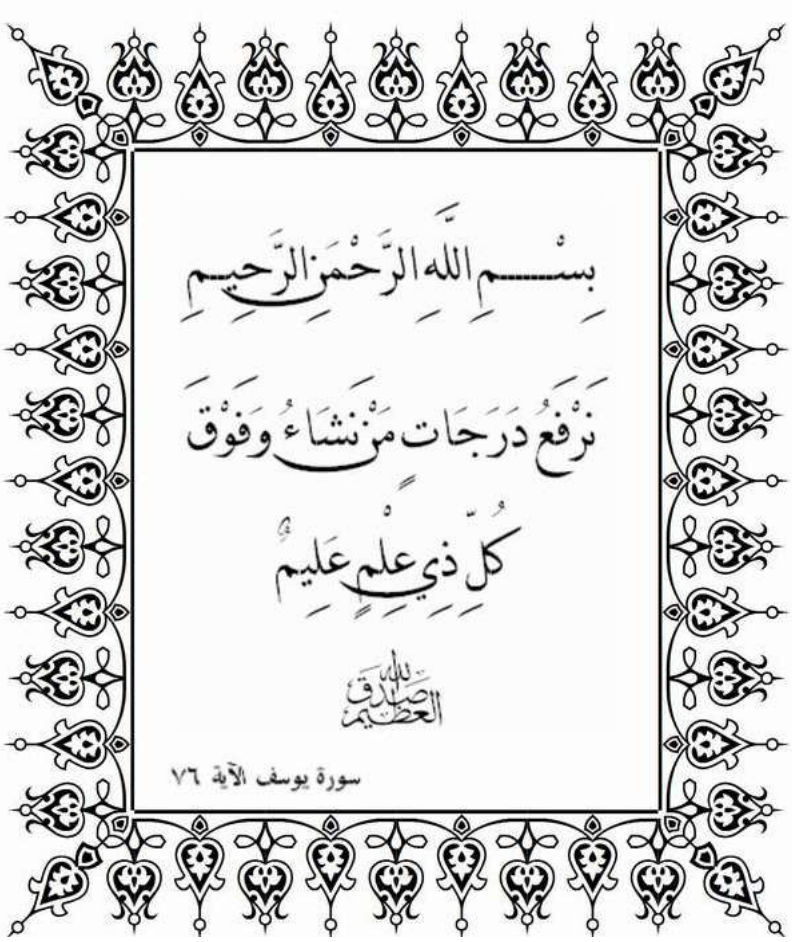
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In the Name of* ALLAH*, the Most Beneficent, the Most Merciful. *First, I wish to express my greatest thanks to* **ALLAH***.*

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List of Abbreviations

AITD	Autoimmune thyroid disease
ALP	Alkaline phosphatase
ALT	Alanine aminotransferase
Anti-HBc	Hepatitis B core antibody
Anti-HBe	Hepatitis B envelope antibody
Anti-HBs	Hepatitis B surface antibody
Anti-HCV	Hepatitis C antibody
Anti-HDV	Hepatitis D antibody
Anti-HEV	Hepatitis E antibody
AST	Aspartate aminotransferase
CLT	Chronic lymphocytic thyroiditis
DIT	Diiodo-tyrosine
DNA	Deoxyribonucleic acid
ELISA	Enzyme linked immunosorbent assay
EMC	Essential mixed cryoglobulinemia
FT3	Free triiodothyronine
FT4	Free thyroxine
GBV-C	Hepatitis GGB virus
GGT	Gamma glutamyl transpeptidase
GH	Growth hormone
GN	Glomerulonephritis

GRTH	Generalized resistance to thyroid hormone
HAV	Hepatitis A virus
HBc	Hepatitis B core antigen
HBeAg	Hepatitis B envelope antigen
HBsAg	Hepatitis B surface antigen
HBV	Hepatitis B virus
HCV	Hepatitis C virus
HDV	Hepatitis D virus
HEV	Hepatitis E virus
HGV	Hepatitis G virus
HIV	Human immunodeficiency virus
HPT	Hypothalamic-Pituitary-Thyroid Axis
IC	Immune complex
IFN	Interferon
IgA	Immunoglobulin A
IgG	Immunoglobulin G
IgM	Immunoglobulin M
IMA	Immunometric assay
IRES	Internal ribosome entry site
MHC	myosin heavy chain
MIT	Monoiodo-tyrosine
MPGN	Membranoproliferative glomerulonephritis
NANB	Non-A-non-B hepatitis
NCR	Noncoding regions

NIS	Sodium iodide symporter
PAC	Papular acrodermatitis of childhood
PAN	Polyarteritis nodosa
PBI	Protein bound iodine
PCR	Polymerase chain reaction
RIA	Radioimmunoassay
RIBA	Recombinant radio-immunoblot assay
RNA	Ribonucleic acid
SPRIA	Solid-phase radioimmunoassay
TBG	Thyroxine-binding globulin
Tg	Thyroglobulin
TPO	Thyroperoxidase
TR	Thyroid hormone receptors
TRH	Thyrotropin releasing hormone
TSH	Thyroid stimulating hormone
TT3	Total triiodothyronine
TT4	Total thyroxin
TBPA	Thyroxine-binding prealbumin
WAT	White adipose tissue

INTRODUCTION AND AIM OF THE WORK

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Recently, a high prevalence of autoimmune thyroid disease (AITD) has been reported in hepatitis C virus (HCV) infection independent on alpha-interferon (IFN) therapy. A significant association between HCV infection and AITD was found ***(Testa et al., 2006).***

The prevalence of thyroid disorders has been evaluated in patients with HCV infection by many studies. There are some studies suggesting a careful thyroid monitoring during the follow-up of patients with HCV infection ***(Antonelli et al., 2006).***

Autoantibody formation may also occur in children with chronic hepatitis B virus (HBV) infection. IFN treatment leads to significant antithyroid autoantibody formation ***(Kansu et al., 2004).***

The aim of this study is to detect the influence of viral hepatitis on thyroid functions independent of interferon therapy.