IN VITRO STUDY OF NEUTROPHIL APOPTOSIS IN CHRONIC HEPATITIS C PATIENTS

Thesis

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In

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By

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Abstract

The aim of this study was to detect the role of neutrophil apoptosis as a mechanism of liver cell injury in chronic hepatitis C in order to determine its relation to shortened neutrophil survival in HCV patients, accounting in part for the mechanism of neutropenia.

Thirty patients with chronic HCV infection were selected for this study and divided into two groups, fifteen patients with chronic HCV without neutropenia (Group I) (8 males and 7 females) and fifteen patients with chronic HCV with neutropenia (Group II) (7 males and 8 females). In addition fifteen apparently healthy individuals served as control group (6 males and 9 females).

Key Words :

Adrenocorticotrophic hormone - Alanine amino transferase - Annexin A1

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To my Husband,

Father, Mother and

My Children Mohamed, Yara and Sara

Who suffered a lot during preparation of this work

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ACTH	Adrenocorticotrophic hormone
AIF	Apoptosis inducing factors
ALT	Alanine amino transferase
ANXA1	Annexin A1
Apaf-1	Apoptotic protease activating factor-1
APRI	Aspartate amino transferase (AST) to platelet ratio index
AST	Aspartate amino transferase
ATP	Adenosine triphosphate
Bad	Bcl-xL/Bcl-2 associated death promoter
Bak	Bcl-2 antagonist killer
Bax	Bcl-2 associated x protein
BcL-2	B-cell lymphoma 2
Bid	BH-3 interacting death domain protein
Bik	Bcl-2 interacting Killer
BIR	Baculovirus IAP repeat domain
CARD	Caspase activation and recruitment domain
Caspase	Cysteinyl aspartic acid protease
CAT	Catalase

CGD	Chronic granulomatous disease
CHC	Chronic hepatitis C
CTL	Cytotoxic T lymphocyte
Cyt-c	Cytochrome c
DBD	DNA-binding core domain
DD	Death domain
DED	Death effector domain
DIABLO	Direct IAP-binding protein with low PI
DIAP1	Drosophila inhibitor of apoptosis protein1
DISC	Death inducing signaling complex
EC	Extracellular domain
EIA	Enzyme immuno assay
ELISA	Enzyme linked immunosorbent assay
FADD	Fas associated death domain
Fas	Factor of apoptotic signal
Fas-L	Fas ligand
FHF	Fulminant hepatic failure
FITC	Fluorescein isothiocyanate
FLICE	FADD-like interleukin-1 converting enzyme
FLIPs	FLICE inhibitory proteins

G-CSF	Granulocyte colony stimulating factor
HBV	Hepatitis B virus
HCL	Hepatoma cell lines
HCV	Hepatitis C virus
HDV	Hepatitis D virus
HIV	Human immunodeficiency virus
HVR	Hypervariable region
IAPs	Inhibitors of apoptosis proteins
IC	Intracytoplasmic domain
ICE	Interleukin-1β converting enzyme
IFN-α	Interferon alpha
IGF-BP3	Insulin like growth factor binding protein-3
IRES	Internal ribosome entry site
ISEL	In situ end labelling
KDa	Kilo Dalton
LAD-1	Leucocyte adhesion deficiency-1
LPS	Lipopolysaccharide
LTB4	Leukotriene B4
MAC	Membrane attack complex