

**Name of the Journal:** *World Journal of Gastroenterology*

**Manuscript NO:** 49818

**Manuscript Type:** ORIGINAL ARTICLE

### *Retrospective Study*

**Hepatitis C virus clearance and less liver damage in patients with high cholesterol, low-density lipoprotein cholesterol and APOE  $\epsilon$ 4 allele**

Gonzalez-Aldaco K *et al.* HCV spontaneous clearance and lipid profile

Karina Gonzalez-Aldaco, Sonia Roman, Rafael Torres-Valadez, Claudia Ojeda-Granados, Luis A Torres-Reyes, Arturo Panduro

### **Abstract**

#### **BACKGROUND**

Cholesterol is related to improvements in the rate of sustained virological response and a robust immune response against the hepatitis C virus (HCV). APOE gene polymorphisms regulate cholesterol levels modifying the course of the HCV infection.

### Match Overview

1	Internet 188 words crawled on 25-Dec-2016 <a href="#">office.wjgnet.com</a>	4%
2	Internet 72 words crawled on 18-Feb-2017 <a href="#">e-sciencecentral.org</a>	1%
3	Crossref 36 words Yu Kyung Kim, Kyung-Min Lee, Won-Kil Lee. "Association between Apolipoprotein E Genotype and Treatment Res...	1%
4	Crossref 31 words Ahmed El-Shamy, Andrea D. Branch, Thomas D. Schiano, Peter D. Gorevic. "The Complement System and C1c...	1%
5	Internet 28 words crawled on 22-Aug-2019 <a href="#">www.liebertpub.com</a>	1%
6	Crossref 27 words N.A. Fierro, K. Gonzalez-Aldaco, S. Roman, A. Panduro... "The Immune System and Viral Hepatitis", Elsevier BV, 20...	1%
7	Internet 26 words crawled on 08-Jul-2016 <a href="#">mdpi.com</a>	1%
8	Crossref 24 words Vanessa Gutierrez de ANDRADE, Fabio da Silva YAMAS HIRO, Cassio Vieira OLIVEIRA, Leticia Lastória KUROZA	<1%
9	Internet 21 words <a href="#">ir.ymlib.yonsei.ac.kr</a>	<1%
10	Internet 21 words crawled on 19-May-2016 <a href="#">www.wjgnet.com</a>	<1%
11	Internet 19 words crawled on 31-Aug-2019 <a href="#">www.mdpi.com</a>	<1%



国内版 国际版

HCV clearance and less liver damage in patients with high cholesterol, LDL-c and ,



All

Images

Videos

翻译成中文

关闭取词

28,700 Results

Any time ▾

## Hepatitis C Virus, Cholesterol and Lipoproteins — Impact ...

<https://www.ncbi.nlm.nih.gov/pmc/articles/PMC3712309>

May 22, 2013 · Hepatitis C virus (HCV) is a leading cause of chronic liver disease, including chronic hepatitis, fibrosis, cirrhosis, and hepatocellular carcinoma. Hepatitis C infection associates with lipid and lipoprotein metabolism disorders such as hepatic steatosis, hypobetalipoproteinemia, and ...

Cited by: 104

Author: Daniel J. Felmlee, Mohamed Lamine Hafi...

Publish Year: 2013

## Do high lipids help clearance of hepatitis C? - ResearchGate

[https://www.researchgate.net/.../6213351\\_Do\\_high\\_lipids\\_help\\_clearance\\_of\\_hepatitis\\_C](https://www.researchgate.net/.../6213351_Do_high_lipids_help_clearance_of_hepatitis_C)

Do high lipids help clearance of hepatitis C? ... patients with liver disease not caused by HCV were similar to those of the total HCV group and in contrast to the HCV patients, the apoE allele ...

## Immunometabolic Effect of Cholesterol in Hepatitis C ...

<https://www.sciencedirect.com/science/article/pii/S1665268119310531>

Hepatitis C virus (HCV) is a lipid-enveloped virion particle that causes infection to the liver, and as part of its life cycle, it disrupts the host lipid metabolic machinery, par

## Apolipoprotein 3 allele is associated with persistent ...

[https://www.researchgate.net/publication/7469665\\_Apolipoprotein\\_3\\_allele\\_is\\_associated...](https://www.researchgate.net/publication/7469665_Apolipoprotein_3_allele_is_associated...)

patients with the E4 allele. 32. ... protects against severe liver disease caused by hepatitis C virus. Hepatology. 2003; ... The serum level of low density lipoprotein-cholesterol (LDL-C) in the ...

## Hepatitis C Virus, Cholesterol and Lipoproteins — Impact ...

<https://www.mdpi.com/1999-4915/5/5/1292/html> ▾

Hepatitis C virus (HCV) is a leading cause of chronic liver disease, including chronic hepatitis, fibrosis, cirrhosis, and hepatocellular carcinoma. Hepatitis C infection associates with lipid and lipoprotein metabolism disorders such as hepatic steatosis, hypobetalipoproteinemia, and hypocholesterolemia. Furthermore, virus production is dependent on hepatic very-low-density lipoprotein (VLDL ...

Cited by: 104

Author: Daniel J. Felmlee, Mohamed Lamine Hafi...

Publish Year: 2013

## APOB codon 4311 polymorphism is associated with hepatitis ...

<https://bmcgastroenterol.biomedcentral.com/articles/10.1186/s12876-018-0747-5> ▾

Jan 30, 2018 · It has been reported that some single-nucleotide polymorphisms (SNPs) in lipid regulators such as apolipoproteins and cell surface molecules for hepatitis C virus (HCV) entry into hepatocytes are associated with HCV infection. However, it is unknown how HCV infection is affected by altered lipid





国内版

国际版

Hepatitis C virus clearance and less liver damage in patients with high cholestero



All

Images

Videos

关闭取词

10,400 Results

Any time ▼

## Hepatitis C Virus, Cholesterol and Lipoproteins – Impact ...

<https://www.ncbi.nlm.nih.gov/pmc/articles/PMC3712309>

May 22, 2013 · **Hepatitis C virus** (HCV) is a leading cause of chronic **liver** disease, including chronic **hepatitis**, fibrosis, cirrhosis, and hepatocellular carcinoma. **Hepatitis C** infection associates with lipid and **lipoprotein** metabolism disorders such as hepatic steatosis, hypobetalipoproteinemia, and ...

Cited by: 103

Author: Daniel J. Felmlee, Mohamed Lamine Hafira...

Publish Year: 2013

## Chronic hepatitis C virus infection and lipoprotein metabolism

<https://www.ncbi.nlm.nih.gov/pmc/articles/PMC4579877>

Sep 28, 2015 · **Hepatitis C virus** (HCV) is a hepatotropic **virus** and a major cause of chronic **liver** disease, including hepatocellular carcinoma, worldwide. The life cycle of HCV is closely associated with the metabolism of lipids and lipoproteins. The main function of lipoproteins is ...

Cited by: 17

Author: Yoshio Aizawa, Nobuyoshi Seki, Tomohisa ...

Publish Year: 2015

## Immunometabolic Effect of Cholesterol in Hepatitis C ...

<https://www.sciencedirect.com/science/article/pii/S1665268119310531>

Introduction. **Hepatitis C virus** (HCV) infection is one of the leading causes of chronic **liver damage** worldwide, at least 180 million people are infected with the **virus**, and it causes approximately 399,000 deaths every year. 1 Eradication of HCV depends on several factors of the host and the **virus** that influence both the natural and pharmacologically-induced **clearance** of HCV in the infected ...

Author: Karina González-Aldaco, Luis A. Torres-...

Publish Year: 2018

## IL28B Gene Polymorphism Is Correlated with Changes in Low ...

[https://www.researchgate.net/publication/333481631\\_IL28B\\_Gene\\_Polymorphism\\_Is...](https://www.researchgate.net/publication/333481631_IL28B_Gene_Polymorphism_Is...)

IL28B Gene Polymorphism Is Correlated with Changes in **Low-density Lipoprotein Cholesterol** Levels after **Clearance** of **Hepatitis C Virus** Using Direct-acting Antiviral Treatment

## Hepatitis C Virus, Cholesterol and Lipoproteins – Impact ...

<https://www.mdpi.com/1999-4915/5/5/1292/htm> ▼

**Hepatitis C virus** (HCV) is a leading cause of chronic **liver** disease, including chronic **hepatitis**, fibrosis, cirrhosis, and hepatocellular carcinoma. **Hepatitis C** infection associates with lipid and **lipoprotein** metabolism disorders such as hepatic steatosis, hypobetalipoproteinemia, and hypocholesterolemia. Furthermore, **virus** production is dependent on hepatic very-low-density **lipoprotein** (VLDL ...

Cited by: 103

Author: Daniel J. Felmlee, Mohamed Lamine Hafira...



All

Images

Videos

关闭取词

10,500 Results

Any time ▾

## Hepatitis C Virus, Cholesterol and Lipoproteins – Impact ...

<https://www.ncbi.nlm.nih.gov/pmc/articles/PMC3712309>

May 22, 2013 · **Hepatitis C virus** (HCV) is a leading cause of chronic **liver** disease, including chronic **hepatitis**, fibrosis, cirrhosis, and hepatocellular carcinoma. **Hepatitis C** infection associates with lipid and **lipoprotein** metabolism disorders such as hepatic steatosis, hypobetalipoproteinemia, and ...

Cited by: 103

Author: Daniel J. Felmlee, Mohamed Lamine Hafira...

Publish Year: 2013

## IL28B Gene Polymorphism Is Correlated with Changes in Low ...

[https://www.researchgate.net/publication/333481631\\_IL28B\\_Gene\\_Polymorphism\\_Is...](https://www.researchgate.net/publication/333481631_IL28B_Gene_Polymorphism_Is...)

IL28B Gene Polymorphism Is Correlated with Changes in **Low-density Lipoprotein Cholesterol** Levels after **Clearance** of **Hepatitis C Virus** Using Direct-acting Antiviral Treatment

## Immunometabolic Effect of Cholesterol in Hepatitis C ...

<https://www.sciencedirect.com/science/article/pii/S1665268119310531>

Introduction. **Hepatitis C virus** (HCV) infection is one of the leading causes of chronic **liver damage** worldwide, at least 180 million people are infected with the **virus**, and it causes approximately 399,000 deaths every year. 1 Eradication of HCV depends on several factors of the host and the **virus** that influence both the natural and pharmacologically-induced **clearance** of HCV in the infected ...

Author: Karina González-Aldaco, Luis A. Torres-...

Publish Year: 2018

## Hepatitis C virus-related symptoms, but not quality of ...

<https://onlinelibrary.wiley.com/doi/10.1111/hepr.12974>

**Low-density lipoprotein** may affect HCV-RNA replication, 29 dietary **cholesterol** intake is associated with progression of **liver** disease in **patients** with HCV infection, 30 and the **APOE-ε4 allele** is protective against attention deficit in HCV-infected individuals. 31 Thus, a full explanation of the relationship between lipids and CSS is ...

Cited by: 2

Author: Tatsuki Ichikawa, Hisamitsu Miyaaki, Satos...

Publish Year: 2018

## Hepatitis C Virus, Cholesterol and Lipoproteins – Impact ...

<https://www.mdpi.com/1999-4915/5/5/1292/htm>

**Hepatitis C virus** (HCV) is a leading cause of chronic **liver** disease, including chronic **hepatitis**, fibrosis, cirrhosis, and hepatocellular carcinoma. **Hepatitis C** infection associates with lipid and **lipoprotein** metabolism disorders such as hepatic steatosis, hypobetalipoproteinemia, and hypocholesterolemia. Furthermore, **virus** production is dependent on hepatic very-low-density **lipoprotein** (VLDL ...

Cited by: 103

Author: Daniel J. Felmlee, Mohamed Lamine Hafira...