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Basic Study

Effect of cholesterol on interstitial Cajal-like cells from guinea pig gallbladders isolated and cultured *in vitro*

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Abstract

BACKGROUND

Loss and/or dysfunction of interstitial Cajal-like cells (ICLCs) in the gallbladder may promote cholesterol gallstone formation by decreaseing gallbladder motility.

AIM

To study the effect of cholesterol on the proliferation and apoptosis of ICLCs from

Match Overview

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| 1 | Crossref 18 words Fan, Ying, Shuodong Wu, Zhenhua Yin, and Bei-Bei Fu. "Cellular and molecular mechanism study of declined intestinal tra... | 1% |
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An in vitro study found that the apoptotic rate of ICLCs significant increased after **co-culture** with **isolated neutrophils** from **guinea pigs** that were subjected to **bile duct ligation** 24. In the present study, we observed similar results in which an increased number of **inflammatory cells** infiltrated the tissue in the model group.

Cited by: 1

Author: Jiang-fan Wan, Jiang-fan Wan, Shi-feng ...

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Ursodeoxycholic acid protects interstitial Cajal-like ...

<https://www.nature.com/articles/aps2017206>

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Briefly, **cholesterol accumulation** in the **gallbladder smooth muscle cells** destroys the signal transduction mediated by protein G resulting from CCK-A binding to its receptor. 52 On the other hand, an excess of **cholesterol** in the membrane of the caveolae probably reduces membrane fluidity, 53 further leading to disturbances in **cytosolic calcium homeostasis**.

Cited by: 2

Author: Lei Chen, Baoping Yu

Publish Year: 2018



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C-Kit expression in the gallbladder of guinea pig with ...

<https://www.ncbi.nlm.nih.gov/pmc/articles/PMC5010843>

A total of 45 **guinea pigs** were randomly assigned into three groups: the control group (**guinea pigs** fed a standard diet, normal group); the model group (**guinea pigs** fed a **cholesterol gallstone** ... +

Author: Hua Feng, Fang Wang, Changmiao W... **Publish Year:** 2016

The role of interstitial Cajal-like cells in the formation ...

<https://link.springer.com/article/10.1007/s12072-015-9623-3> ▾

Mar 19, 2015 · To investigate the **effect of interstitial Cajal-like cells** (ICLCs) on contraction of **gallbladder muscle strips**; and to analyze the changes of ICLCs during ... +

Cited by: 4 **Author:** Ying Fan, Shuodong Wu, Beibei Fu, Cha...

Publish Year: 2015

Ursodeoxycholic acid protects interstitial Cajal-like ...

<https://www.ncbi.nlm.nih.gov/pmc/articles/PMC6289353>

An in vitro study found that the apoptotic rate of ICLCs significant increased after **co-culture** with **isolated neutrophils** from **guinea pigs** that were subjected to **bile duct ligation** 24. In the ... +

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Ursodeoxycholic acid protects interstitial Cajal-like ...

www.nature.com/articles/aps2017206

May 17, 2018 · **Hypomotility** is a common symptom of gallstone disease, which is accompanied by a loss of interstitial Cajal-like cells (ICLCs) in the gallbladder. **Ursodeoxycholic acid** ... +

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Telocytes and interstitial cells of Cajal in the biliary ...

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3. ERA OF TCS IN THE BILIARY SYSTEM. In 2007, Lavoie et al³⁵ identified the presence of TCs in the gallbladder of **guinea pig**. Around the same time, in human gallbladder, Hinescu et al³⁶ also ... +

Cited by: 2 **Author:** Lei Chen, Baoping Yu