

[1]李婧文,徐胤,夏一菊,等.KLF4与Notch1在脱氧胆酸诱导Barrett食管形成过程的作用[J].第三军医大学学报,2014,36(09):878-882.

Li Jingwen,Xu Yin,Xia Yiju,et al.Roles of KLF4 and Notch1 in deoxycholic acid-induced Barrett' s esophagus[J].J Third Mil Med Univ,2014,36(09):878-882.

[点击复制](#)

## KLF4与Notch1在脱氧胆酸诱导Barrett食管形成过程中作用的研究

《第三军医大学学报》[ISSN:1000-5404/CN:51-1095/R] 卷: 36 期数: 2014年第09期 页码: 878-882 栏目: 论著 出版日期: 2014-05-15

Title: Roles of KLF4 and Notch1 in deoxycholic acid-induced Barrett' s esophagus

作者: 李婧文; 徐胤; 夏一菊; 王璞; 沈才飞; 张安然; 邵顺子; 于晓娜; 张昊祥; 闫武; 房殿春  
第三军医大学西南医院全军消化病研究所

Author(s): Li Jingwen; Xu Yin; Xia Yiju; Wang Pu; Shen Caifei; Zhang Anran; Shao Shunzi; Yu Xiaona; Zhang Haoxiang; Yan Wu; Fang Dinchuan  
Institute of Gastroenterology, Southwest Hospital, Third Military Medical University, Chongqing, 400038, China

关键词: 脱氧胆酸; Krüppel样锌指转录因子4; Notch1; Het-1A细胞; Barrett食管

Keywords: deoxycholic acid; Krüppel-like factor 4; Notch1; Het-1A cells; Barrett' s esophageal

分类号: R363.21; R394.2; R571.02

文献标志码: A

摘要: 目的 探讨Krüppel样锌指转录因子4(Krüppel-like factor 4, KLF4)和Notch1在Barrett食管组织中的表达以及脱氧胆酸(deoxycholic acid,DCA)对正常食管鳞状上皮Het-1A细胞KLF4与Notch1表达水平的影响。方法 免疫组化S-P法检测49例人正常食管组织、26例食管炎和22例Barrett食管组织中KLF4、Notch1的表达水平;采用不同浓度(0、100、200 μmol/L)的DCA对永生化的正常食管鳞状上皮Het-1A细胞分别处理4、8、12 h,RT-PCR和Western blot检测KLF4、Notch1 mRNA及蛋白表达。结果 免疫组化检测发现,与正常人食管鳞状上皮组织相比,食管炎与Barrett食管组织中KLF4呈现高表达,且Barrett食管组织表达最高( $P<0.05$ ),而Notch1的表达则无明显差异。RT-PCR及Western blot结果显示,随DCA浓度的增高以及处理时间的增加,Het-1A细胞表达KLF4、Notch1的mRNA和蛋白的水平逐渐升高( $P<0.05$ )。结论 DCA可能通过促进KLF4、Notch1表达而参与正常食管上皮转化为Barrett食管的过程。

Abstract: Objective To determine the expression of Krüppel-like factor 4 (KLF4) and Notch homolog 1 (Notch1) in Barrett' s esophageal tissues, and the effect of deoxycholic acid (DCA) on the expressions of the 2 molecules in human

### 导航/NAVIGATE

[本期目录/Table of Contents](#)

[下一篇/Next Article](#)

[上一篇/Previous Article](#)

### 工具/TOOLS

[引用本文的文章/References](#)

[下载 PDF/Download PDF\(1848KB\)](#)

[立即打印本文/Print Now](#)

[查看/发表评论/Comments](#)

[导出](#)

### 统计/STATISTICS

[摘要浏览/Viewed](#) 64

[全文下载/Downloads](#) 35

[评论/Comments](#)

[RSS](#) [XML](#)

esophageal squamous epithelial Het-1A cells. Methods

Immunohistochemical SP staining was applied to evaluate the levels of KLF4 and Notch1 in 49 samples of normal esophageal tissues, 26 samples of esophagitis and 22 samples of Barrett' s esophageal tissues. After Het-1A cells were treated with different concentrations of DCA for 4, 8 and 12 h, the expressions of KLF4 and Notch1 at mRNA and protein levels were detected by real-time PCR and Western blotting, respectively. Results Immunohistochemical staining indicated that KLF4 was strongly expressed in the Barrett' s esophagus and esophagitis tissues compared with normal tissues, and its level was highest in the Barrett' s esophagus ( $P<0.05$ ), but no obvious change was seen in the expression of Notch1 among the 3 kinds of tissue samples. RT-PCR and Western blotting revealed that the mRNA and protein levels of KLF4 and Notch1 was enhanced in a time- and dose-dependent manner in HET-1A cells induced by DCA ( $P<0.05$ ).

Conclusion DCA takes part in the transformation of normal esophageal epithelia to Barrett' s esophagus, probably through promoting the expression of KLF4 and Notch1.

---

参考文献/REFERENCES:

李婧文, 徐胤, 夏一菊, 等. KLF4与Notch1在脱氧胆酸诱导Barrett食管形成过程的作用[J].第三军医大学学报, 2014, 36(9):878-