

论著

## 4-羟基他莫昔芬对泌乳素腺瘤CH3细胞生长增殖

崔友强, 滕良珠, 郭华, 李国新, 庞琦

山东大学山东省立医院神经外科, 山东 济南 250021

收稿日期 2005-5-3 修回日期 2005-7-11 网络版发布日期 2008-7-13 接受日期 2005-7-11

**摘要** 目的: 探讨雌激素受体拮抗剂4-羟基他莫昔芬(OHTam)对泌乳素腺瘤细胞体外生长的作用。方法: 用逆转录多聚酶链反应(RT-PCR)测定泌乳素腺瘤细胞株CH3细胞中雌激素受体-mRNA(ER-mRNA)表达, 在去激素培养条件下观察不同浓度的4-羟基他莫昔芬和雌二醇(E2)对其生长速度和ER-mRNA表达水平的影响。结果: 泌乳素腺瘤CH3细胞去激素环境下生长明显低于正常培养组, 低浓度E2( $10^{-8}$ mol/L)显著高于去激素培养组, OHTam( $10^{-6}$ mol/L)可抑制E2( $10^{-8}$ mol/L)的生长刺激作用; CH3细胞有ER-mRNA表达, E2( $10^{-8}$ mol/L)组ER-mRNA表达水平高于去激素培养组, 而OHTam( $10^{-6}$ mol/L)能抑制其对ER-mRNA表达作用。结论: CH3细胞株的生长具有雌激素依赖性, 应用ER拮抗剂OHTam能抑制其生长, 降低ER-mRNA表达。泌乳素腺瘤细胞中ER水平存在自身调节现象。

**关键词** 催乳素瘤; 雌激素拮抗剂; 他莫昔芬; CH3细胞

分类号 R739.4

## Effects of 4-hydroxytamoxifen on the growth and proliferation of prolactinomas CH3 cells

CUI You-qiang, TENG Liang-zhu, GUO Hua, LI Guo-xin, PANG Qi

Department of Neurosurgery, Shandong University, Shandong Provincial Hospital, Jinan 250021, China

### Abstract

<P><FONT face=Verdana>AIM: To investigate the effect of estrogen antagonists on the in vitro growth of human prolactinomas. METHODS: RT-PCR was applied to the detection of estrogen receptor (ER) mRNA expressed in a </FONT><FONT face=Verdana>human prolactinomas CH3 cell strain. Estradiol and 4-hydroxytamoxifen (OHTam) were added </FONT><FONT face=Verdana>respectively at different concentrations into the culture medium. Cell number and levels of </FONT><FONT face=Verdana>ER mRNA were examined. RESULTS: The growth of CH3 cells became slower in estrogen-deprived medium than that in </FONT><FONT face=Verdana>nomal culture and was higher in medium containing estrogen(E2) at concentration of  $10^{10}$ mol/L than at concentration of  $10^{11}$ mol/L. OHTam ( $10^{10}$ mol/L) inhibited the growth of CH3 </FONT><FONT face=Verdana>cell strain treated with E2. The expression of ER mRNA in CH3 cells was observed, the </FONT><FONT face=Verdana>levels of ER mRNA in the E2 ( $10^{10}$ mol/L) group, higher than those in estrogen deprived </FONT><FONT face=Verdana>group. OHTam ( $10^{10}$ mol/L) obviously inhibited the expression of ER mRNA. <BR>CONCLUSION: The growth of CH3 cells depends on estrogen, estrogen antagonists inhibits the growth of CH3 cells and decline the levels of ER mRNA. ER levels in human prolactinomas cell lines can be auto-regulated.</P>

**Key words** [Prolactinoma](#) [Estrogen antagonists](#) [Tamoxifen](#) [CH3 cells](#)

### 扩展功能

#### 本文信息

- [Supporting info](#)
- [PDF\(4292KB\)](#)
- [\[HTML全文\]\(0KB\)](#)

#### 参考文献

#### 服务与反馈

- [把本文推荐给朋友](#)
- [加入我的书架](#)
- [加入引用管理器](#)
- [复制索引](#)
- [Email Alert](#)
- [文章反馈](#)
- [浏览反馈信息](#)

#### 相关信息

- [本刊中包含“催乳素瘤; 雌激素拮抗剂; 他莫昔芬; CH3细胞”的相关文章](#)

#### ►本文作者相关文章

- [崔友强](#)
- [滕良珠](#)
- [郭华](#)
- [李国新](#)
- [庞琦](#)

通讯作者 崔友强 [cuiyouqiang88@163.com](mailto:cuiyouqiang88@163.com)