

综述

内质网应激在肺肿瘤中的作用

Published at: September 04, 2014 [2014年第34卷第4期](#)

王李乐¹, 胡瑞成², 戴爱国²

¹南华大学附属省马王堆医院呼吸内科, 长沙 410016; 湖南省老年医院呼吸疾病研究所, 长沙 410001

²湖南省老年医院呼吸疾病研究所, 长沙 410001

通讯作者 爱国 戴 Email: huruicheng@hotmail.com

DOI: 10.11714/j.issn.2095-6959.2014.04.026

基金:

摘要

内质网是细胞的蛋白质加工厂, 主要负责蛋白质的合成、折叠和装配。各种生理和病理条件(如缺氧、氧化还原状态的变化)可能会干扰内质网的功能, 并导致未折叠蛋白在内质网中积累, 导致内质网应激(endoplasmic reticulum stress, ERS)。ERS是细胞抵抗外来不良刺激的一种重要保护机制, 也是决定细胞命运的关键。适度的ERS能够促进肺肿瘤细胞生存和转移, 过度的ERS则促进肺肿瘤细胞凋亡。多种抗肿瘤药物都可通过加重ERS而促进肺肿瘤细胞凋亡。

关键词: [内质网应激](#); [肺肿瘤](#); [细胞凋亡](#)

Roles of endoplasmic reticulum stress in lung tumors

WANG Lile¹, HU Ruicheng², DAI Aiguo²

¹ Department of Respiratory, Hunan Mawangdui Hospital Affiliated to University of South China, Changsha 410016; Institute of Respiratory Disease, Hunan Geriatric Hospital, Changsha 410001, China

² Institute of Respiratory Disease, Hunan Geriatric Hospital, Changsha 410001, China

Abstract

Endoplasmic reticulum is a protein's factory which has many function such as protein synthesis, folding and assembly. A variety of injuries (including hypoxia changes in redox state) can interfere the function of the endoplasmic reticulum and cause unfolded protein accumulation in the endoplasmic reticulum, which result in

endoplasmic reticulum stress (ERS). when external negative factors comes to cells, ERS is an important protective mechanism, as well as a key which decide their fate. Although reasonable ERS can promote lung cancer cells survival and metastasis, excessive ERS may cause lung cancer cells apoptosis. Various anticancer drugs can induce apoptosis of lung cancer cells by means of reinforcing ERS.

Keywords: [endoplasmic reticulum stress](#) [lung tumor](#) [apoptosis](#)

Please enable JavaScript to view the [comments powered by Disqus](#). [comments powered by Disqus](#)

全文

- [PDF](#)

引用

引用本文: 李乐 王, 瑞成 胡, 爱国 戴. 内质网应激在肺肿瘤中的作用[J]. 临床与病理杂志, 2014, 34(4): 451-154.

Cite this article as: WANG Lile, HU Ruicheng, DAI Aiguo . Roles of endoplasmic reticulum stress in lung tumors[J]. Journal of Clinical and Pathological Research, 2014, 34(4): 451-154.