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综述

自噬在神经胶质瘤放化疗中的作用及其分子调控机制研究进展

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摘要 自噬是真核细胞中广泛存在的降解和再循环系统，近年研究发现，放疗和化疗不仅可引起神经胶质瘤细胞凋亡，还可以诱导自噬。细胞自噬可能导致细胞自噬死亡，也有可能导致自噬保护，显示双应重效应，可见自噬与神经胶质瘤的发生、发展以及治疗密切相关。其分子调控机制可能与雷帕霉素靶蛋白， beclin 1， 磷脂酰肌醇-3-激酶， 第10号染色体丢失的张力蛋白同源的磷酸酶以及微管相关蛋白1轻链3等内容有关。

关键词 自噬 神经胶质瘤 抗肿瘤联合化疗方案

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Progress in effect of autophagy on gliomas radiation therapy and chemotherapy and molecular regulating mechanism

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Abstract

Autophagy occurs in all types of eukaryotic cells which involves degradation and recycling of cytoplasmic components. Recent researches indicated that radiation therapy and chemotherapy could induce not only apoptosis but also autophagy in malignant glioma cells. Autophagy may lead to cells autophagic death and cells autophagic protection contrarily. Autophagy associated with genesis, development and therapy of malignant gliomas. The molecular regulating mechanisms of autoghagy should include with target of rampamcin, Beclin 1, phosphoinositide-dependent protein kinase- 1, PTEN and LC3. This review focuses on the roles of autophagy in radiation therapy and chemotherapy of glioma and its molecular regulating mechanism.

Key words autophagy glioma antineoplqastic combined chemotherapy protocols

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