

ATRA inhibits experimental liver metastasis of gastric cancer cells in nude mice

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Supported by the Natural Science Foundation of Fujian Province, No. C96002

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Received: November 16, 1999
Revised: April 2, 2000
Accepted: May 16, 2000
Published online: September 15, 2000

Abstract

AIM: To study the effects of ATRA on experimental liver metastasis of gastric cancer cells.

METHODS: MGc80-3 and SGC-7901 cells were injected into

spleen subcapsule of nude mice, who were subsequently administrated with ATRA every other day. Food intake and body weight of mice were measured weekly. After six weeks, the nude mice were executed, tumors in spleen and liver were examined pathologically, microtumor vessel density (MVD) was accounted by immunohistochemical method and serum CEA was measured by radioimmunoassay.

RESULTS: Nude mice administrated with ATRA, the growth of spleen tumor and its metastatic ability to liver were inhibited, the metastatic rate was decreased by 33.3% (MGc80-3) and 50.0% (SGC-7901). Spleen MVD and liver MVD were reduced by 28.6% and 22.9% (MGc80-3), 23.7% and 37.6% (SGC-7901), respectively. The serum CEA was lowered by 43.4% (MGc80-3).

CONCLUSION: ATRA can effectively inhibit the experimental liver metastasis of gastric cancer cells, which is relevant with the decrease of MVD and CEA.

Key words: Stomach neoplasms; Tretinoin; Liver neoplasms; Liver metastasis; Immunohistochemistry; Mice, nude

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Chen YQ, Wu Q, Chen ZM, Chen F, Su WJ. ATRA inhibits experimental liver metastasis of gastric cancer cells in nude mice. *World J Gastroenterology* 2000; 6(Suppl 3): 113 Available from: URL: <http://www.wjgnet.com/1007-9327/full/v3/iSuppl3/113.htm> DOI: <http://dx.doi.org/10.3748/wjg.v3.iSuppl3.113>

E- Editor: Hu S



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