Hemangioma: Desaparecimento com mistura nutricional: lisina, arginina, prolina, chá verde, etc

Antiangiogenic properties of a nutrient mixture in a model of hemangioma.


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Abstract
The pathogenesis of hemangiomas is still largely unknown and the current therapy, such as systemic corticosteroid, vincristine, and interferon-alpha, is toxic and remains unsatisfactory. A nutrient mixture (NM) containing lysine, proline, ascorbic acid and green tea extract has shown significant anti-angiogenic and anti-tumor effect against a number of cancer cell lines. Aim: Using a mouse hemangioendothelioma model, we investigated the efficacy of NM. We also tested the effect of NM in vitro, evaluating cell viability, MMP secretion, invasion, morphology and apoptosis. METHODS: Athymic nude mice, 5-6 weeks old, were inoculated with 3 x10^6 EOMA cells subcutaneously and randomly divided into two groups: group A was fed a regular diet and group B - a regular diet supplemented with 0.5% NM. Four weeks later, the mice were sacrificed and their tumors were excised, weighed and processed for histology. We also tested the effect of NM in vitro. RESULTS: NM inhibited the growth of tumors by 50%. In vitro, NM exhibited dose response cytotoxicity with 10%, 30% and 55% at 10, 100 and 1000 microg/ml. Invasion through Matrigel was inhibited at 50, 100 and 500 microg/ml by 25%, 30% and 100% respectively. NM induced dose-dependent apoptosis of EOMA cells. CONCLUSIONS: These results suggest that NM may have therapeutic potential in treating infantile hemangioendotheliomas and, perhaps, other cutaneous vascular tumors.

PMID: 20010532