

L'iperossigenazione regionale: un importante fattore di potenziamento della chemioterapia antineoplastica

[Regional Hyperoxygenation: An Important Enhancing Factor of Anticancer Chemotherapy]

Carlo Nervi; Carlo Casale & Massimo Cortese

(Divisione di Radioterapia dell'Instituto Regina Elena per lo Studio e la Cura dei Tumori, Roma)

Tumori **55**: 153-160, 1969

[PubMed ID: 4195416](#)

ISSN: 0300-8916

Article Written in Italian

Summary

Tissue hyperoxygenation is an important factor in enhancing the antitumor activity of cytotoxic agents. The authors describe their technique for regional hyperoxygenation by intra-arterial infusion of hydrogen peroxide combined with anticancer agents. The method was tried in 34 patients with extensive head and neck tumors. Objective regression was obtained in 19 (55,7 %). Hyperoxygenation probably influences the cellular metabolic and enzymatic processes, thus enhancing the antineoplastic activity of cytotoxic agents. The method described is useful either as a palliative in extensive inoperable tumors, especially those previously irradiated, or as a first chemotherapeutic step in a comprehensive program of treatment in resistant, slow-growing tumors.