



Title Vitamin C, EDTA, and Ultraviolet in Cancer Treatment

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Aim

To assess the effectiveness, safety, and cost effectiveness of vitamin C, ethylenediaminetetraacetic acid (EDTA), and ultraviolet in treating cancer.

Conclusions and results

Evidence was insufficient to support the effectiveness and safety of vitamin C in treating cancer, and we found no evidence on its cost effectiveness. Our findings were based on 5 studies (1 health technology assessment, 1 large randomized, controlled clinical trial, and 3 small nonrandomized, noncontrolled clinical trials). The possibility to infer findings to vitamin C specifically is limited because the studies used multicomponent interventions. They showed no significant decrease in risk of all-cause mortality, or changes in response rate and overall survival for (combined) vitamin C as a treatment for advanced cancer. In terms of safety, vitamin C was well-tolerated in high doses (oral and intravenous). No evidence was retrieved on the effectiveness, safety, and cost effectiveness of EDTA and ultraviolet in treating cancer.

Recommendations

Vitamin C, EDTA, and ultraviolet are not recommended in cancer treatment until further scientific evidence is available to support their effectiveness, safety, and cost effectiveness.

Methods

We searched electronic databases for scientific literature: PubMed/MEDLINE, Cochrane, INAHTA, and general search engines. The search strategy used the following terms, either alone or in combination: neoplasms [MeSH] AND therapeutics [MeSH]), cancer OR neoplasms; cancer treatment; ascorbic acid [MeSH]; vitamin C; edetic acid [MeSH]; ethylenediaminetetraacetic acid OR EDTA; ultraviolet therapy [Mesh]; ultraviolet treatment. In the PubMed/MEDLINE database, the following limitations applied: humans, clinical trial, meta-analysis, randomized controlled trial, review, and English.

Further research/reviews required

Further evidence is needed on the effectiveness, safety, and cost effectiveness of vitamin C, ethylenediaminetetraacetic acid (EDTA), and ultraviolet in treating cancer.