

Mistletoe Therapy/Viscum Album

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The blooms are Mistletoe growing within the tree.



Mistletoe, also known by its botanical name *Viscum album*, is a plant that grows on the branches of trees, particularly hardwood trees like oak, apple, and hawthorn. It's known for its distinctive appearance with clusters of white berries and waxy leaves. Mistletoe has a long history of cultural significance and is often associated with Christmas traditions. In terms of biology, mistletoe is a hemi parasitic plant, meaning it relies on its host tree for water and nutrients but can also photosynthesize, create its own energy, to some extent.

Mistletoe has been used in traditional medicine for centuries. The use of mistletoe therapy in cancer patients was pioneered by the Anthroposophical Medicine physicians' Rudolf Steiner and Ita Wegman, MD in the early 1900's.

Mistletoe extracts are water extracts from the entire mistletoe plant. The harvesting and extraction process is an extensive process that is carefully carried out by the manufacturer. The most common routes of administration of a

Mistletoe extract are either a subcutaneous injection (just under the skin) three times per week, or via an intravenous infusion. Less commonly, mistletoe extract can be given by mouth, or injected into a vein, or into a tumor. Mistletoe has been used before, during and after conventional treatment.

Mistletoe extract contains several different types of biochemical compounds such as viscotoxins, lectins, flavonoids, phenolic acids and polysaccharides. Viscotoxins and lectins constituents are probably the most studied. Studies conducted with Mistletoe extracts have found that it:

- Has a positive impact on both the innate and adaptive immune systems. Some examples include increasing the number of lymphocytes and neutrophils, increasing the activity of natural killer (NK) cells.¹
- Reducing cancer related fatigue ²
- Improve quality of life (QoL)³
- Reducing inflammation ⁴

Some recent examples of the results of studies in the use of mistletoes in cancer patients

Meta-analysis of studies on the use of Mistletoe on Quality of Life in women with breast cancer. ⁵

This study was a meta-analysis and systematic review of both randomized control trials (RCT) (9 studies, involving 833 women) and retrospective non-randomized studies of interventions (NRSI) (7 studies, involving 2831 women) comparing the quality of life in breast cancer patients treated with mistletoe extracts

as add-on therapy to control groups treated conventionally.

The findings of the analysis indicate there is a positive, clinically relevant moderate effect of mistletoe extract on the quality of life in breast cancer patients both the and NSRI. Since the administration of the mistletoe extracts in these studies was via self-injections, the inability to blind the participants to the treatment heightens the risk of bias in the analysis.

Mistletoe, Quality of Life and Cancer patients ³

This study was a meta-analysis of studies comparing the quality of life in cancer patients treated with mistletoe extracts as add-on therapy to control groups only treated conventionally. The study participants included in the analysis had different cancers such as: lung, breast, colorectal, head and neck, sarcomas, etc. and the breadth of the conventional treatments varied as did the form of the mistletoe used and QoL addressed.

The findings of the analysis indicate there as a positive, clinically relevant moderate effect of mistletoe extract on the quality of life in these cancer patients. Since the administration of the mistletoe extracts was via self-injection, the inability to blind the participants to the treatment heighten the risk of bias in the analysis. Further, there was a high degree of heterogeneity in the results since meta-analysis included studies in people with different cancers, that used different tools to evaluate the QoL etc.

Viscum album use in non-small cell lung cancer patients ⁶

In a real-world data study, the self-assessed quality of life of 112 non-small cell lung cancer patients was analyzed. Assessments were done at the outset of the study and then 12 months later. After the 12-month period, the analysis revealed significant improvements for

pain and nausea/vomiting in those patients receiving Viscum album and along with radiation. While in those patients who only received the Viscum album without radiation, they demonstrated additional improvements in physical, cognitive and social functioning.

Intravenous Viscum Album Dose Escalation Study ⁷

In a recent Phase I clinical study designed to evaluate the safety and the maximum tolerable dose of mistletoe extract administered intravenously, recruited 21 patients with relapsed/refractory metastatic cancer. Doses up to 600 mg three times per week were found to be well tolerated with outcomes that included control of the cancer and improved quality of life.

Additional information on Mistletoe therapy is available here:

For patients: <https://www.mistletoe-therapy.org/information-for-patients/>

Further Scientific Information:

<https://www.mistletoe-therapy.org/scientific-information>

Mistletoe products are produced by Helixor. Additional information is available here: <https://helixor.com/mistletoe-therapy/>

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