

Therapeutic effects of mistletoe ingredients

Mistletoe preparations are phytopharmaceuticals, i.e. herbal medicines, and use the whole plant or the plant composition of drugs as the basis of their therapeutic effect. However, some manufacturers focus their efforts exclusively on one ingredient, the lectin content of mistletoe.

In this context, the widely held view that herbal medicinal products are harmless is contradicted. Although the side effects of mistletoe therapy are comparatively low, individual ingredients are among the most toxic substances known. Mistletoe preparations are therefore

pharmacy and not without medical supervision. The fact that



only minor side effects still occur is due to the interaction of the various ingredients of the mistletoe. However, this effect, known as synergy, is also reflected in a completely different way. For example, laboratory tests on different tumor cells have shown that individual ingredients of the mistletoe, such as the lectins, have a significantly lower therapeutic effect than the overall extract of the mistletoe plant.

Two important groups of active ingredients of mistletoe are viscotoxins and lectins.

Viscotoxins trigger so-called necrosis, i.e. they cause cell death due to inflammation-accompanied poisoning of the cell.

Lectins, on the other hand, act on the nucleus and trigger a so-called apoptotic reaction of the cell. Apoptosis means that an ordered degradation of all cell components comparable to natural cell death is stimulated. So far, four groups of mistletoe lectins are known.

In addition to the function described directly against the diseased cell, mistletoe has, as described above, the property of modulating the immune system. The immune system as a whole, non-specific or specific, can be stimulated by its ability to deal with diseased cells or foreign substances. Among the non-specific reactions that are innate to the immune system is, among other things, a strong multiplication of leukocytes in the blood. Specifically, i.e. the immune system learns this reaction by the administration of the drug, for example, the increased formation of T and B cells works. Mistletoe therapy thus incentivises the immune system to "remember" its ordering and purifying function. This is proven by clinical studies.

Mistletoe therapy is therefore to be regarded as a useful supplement to conventional therapies!