

Micro-immunotherapy & Herpes Simplex Virus Infections



Keep the virus under control



Many know the feeling: a tingling sensation around the lips that often follows a period of stress or extended sun exposure, such as while enjoying a skiing holiday. Soon, itchy and painful blisters appear. You glance in the mirror and see it: a bothersome cold sore, also known as herpes labialis. But what exactly causes herpes to manifest in the body? What factors contribute to its appearance? And how can micro-immunotherapy assist in managing herpes?

A closer look at Herpes simplex viruses

Herpes simplex comprises various diseases caused by Herpes simplex viruses (HSV) 1 and 2¹. These two closely related viruses have different infection sites and trigger distinct symptoms:

- HSV-1 mainly causes infections around the mouth and in the facial area (cold sores). It is primarily transmitted skin-to-skin or via mucosal contact.
- HSV-2 mainly affects the genital area (genital herpes). Patients affected suffer from pain, sometimes fever, lesions and lymphadenopathies (swollen lymph nodes). It is transmitted through genital contact.

Despite these differences, both types of viruses may potentially appear on any part of the body.

Herpes simplex viruses are widespread throughout the world. It is assumed that approximately 67% of the world population aged under 50 carries Herpes simplex virus 1¹. In most cases infections are asymptomatic, with no complications associated. However, in people with an immune deficiency, complications such as herpetic keratitis (inflammation of the eye cornea) or herpetic encephalitis (disorder of the central nervous system) may arise¹. HSV-1 has also been associated with the onset of Alzheimer's² and multiple sclerosis³. Moreover, an active HSV-2 infection during pregnancy can increase the risk of having a child with autism.

Like many other herpesviruses, herpes simplex viruses stay inside the body for a lifetime after the initial infection. More precisely, they enter a "dormant state" (latency) and are kept under control by the immune system. Nevertheless, the virus may escape this "dormant state" and start replicating itself again (reactivation) (Fig. 2) if the immune system is weakened or our defence system is impaired on a temporal or permanent basis (Fig. 1). This is when cold sores reappear⁵.

| | Infections accompanied by fever | | Injuries on the lips, e.g. due to dental manipulation |
|----------|---|----------------|---|
| * | Psychological stress / emotional burdens | O _O | Treatments straining the im- mune system (chemotherapy, immunosuppressive treatments, surgeries) |
| | Physical strain | Ŷ | Hormonal fluctuations (menst- rual bleeding, pregnancy) |
| | High UV-radiation | | |

Fig. 1. Factors favouring new herpes outbreaks

Taking this into consideration, it becomes clear that the body's own defence mechanisms are the best shield against herpes simplex virus infections. A strong immune system is the key to preventing a herpes outbreak or ensuring a mild course.



Fig. 2. Simplified diagram of the HSV replication cycle

- 1. Primary infection: Herpes simplex viruses enter the body through the oral mucosa or the genital area. There they replicate in specific host cells, the so-called epithelial cells. The infection is largely kept under control by the immune system.
- 2. "Dormant" phase: Some viruses evade immune control, their components reach the sensory ganglia, where they enter a kind of "dormant" state.
- 3. Reactivation (switch to active replication phase): It usually occurs in case of immune deficiency. The virus switches from the inactive to the active phase, whereby it returns to the skin or the mucosa to replicate. The typical fluid-filled blisters may reappear as a result.

The micro-immunotherapy approach

Micro-immunotherapy acts on multiple levels by communicating with the immune system through messenger substances.

The micro-immunotherapy formula used to treat HSV infections is composed of different nucleic acids in low doses and is aimed at preventing prevent further viral replication, i.e. the infection of further cells, and favouring the production of interferons. These immune messenger substances play an important role in the antiviral immune response. Thus, micro-immunotherapy helps to accelerate the process of recovery.

Micro-immunotherapy formulas can be used in all age groups as they are easy to take sublingually (under the tongue) and have a good safety profile given their low dosage. They can be combined with other therapeutic approaches and can basically be integrated into any preventive program or treatment plan.



Fig. 3. Benefits of micro-immunotherapy

Study on the use of micro-immunotherapy for genital herpes

A few years ago, a clinical follow-up study was conducted on patients with genital herpes who were treated with micro-immunotherapy. The goal was to assess the efficacy of a specific micro-immunotherapy formula with regard to the recurrency of the blisters, the intensity of the symptoms and treatment tolerability.



52 patients with genital herpes aged over 18 with a minimum of 4 outbreaks annually were followed. The micro-immunotherapy treatment was initiated immediately after the herpes outbreak and lasted for at least 2 months. Patients took 1 capsule per day.

The results of the study were the following: 82% of the patients benefited from the treatment. In 41% of the cases, no remissions occurred in a period of 8 to 50 months. 1 or 2 remissions were registered in 32% of the patients. 9% continued suffering from recurrent herpes, although less frequently and with symptoms less intense.

The results show that micro-immunotherapy can be of help in the treatment of chronic genital herpes.

Conclusion

Micro-immunotherapy is an efficient and gentle treatment option to support the immune system in case of acute, chronic or recurrent infections. It aims at re-establishing the balance and efficacy of the immune response in a natural and sustainable way. As explained above, micro-immunotherapy has proven to have a positive effect on Herpes simplex virus 1 and 2 infections as well as associated diseases (cold sores and genital herpes, among others).

Micro-immunotherapy's effect acts on multiple levels and is aimed at relieving the symptoms by addressing the underlying cause of cold sores or genital herpes. Its objective is not only to dampen viral replication but also to strengthen immunity in order to prevent new outbreaks. Patients with recurrent herpes outbreaks who have been treated with micro-immunotherapy have reported about longer intervals between remissions or no remissions at all. In some cases the herpes blisters do reappear. However, the course is milder and the affected area heals rapidly.

Literature

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