

THE ROLE OF PHYTOTHERAPY IN PATIENTS WITH TUBERCULOSIS

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Abstract: *This paper examines the role of herbal medicine in the complex treatment of patients with tuberculosis. Particular attention is paid to the use of medicinal plants to improve the general condition of the body, enhance immunity and reduce the side effects of drug therapy. The results of studies confirming the effectiveness of herbal medicine as an auxiliary method in the fight against tuberculosis are presented.*

Key words: *tuberculosis, herbal medicine, medicinal plants, treatment, immunity, side effects, complex therapy*

Tuberculosis is one of the most common infectious diseases, affecting millions of people worldwide. Despite significant advances in medicine, treating tuberculosis remains a challenge, especially when the pathogen is resistant to anti-TB drugs. In this regard, there is growing interest in alternative and complementary therapies, including herbal medicine – the use of medicinal plants to treat and prevent diseases.

The Importance of Phytotherapy in Tuberculosis

Phytotherapy is the oldest form of treatment in folk medicine, which is actively used in various cultures. Medicinal plants have a wide range of pharmacological effects, including anti-inflammatory, antimicrobial, immunomodulatory and tonic effects, some representatives of which also have the ability to influence the process of connective tissue development. This is of great importance in patients with destructive processes in the lung parenchyma. Phytotherapy allows you to reduce the archive remaining after treatment. In the treatment of tuberculosis, phytotherapy can serve as an important addition to traditional methods of treatment, enhancing their effectiveness and reducing the side effects of chemotherapy. One of the qualities of herbal remedies is their availability and cheapness, as well as the absence of side effects, unlike chemical drugs.

The properties of plants to affect the causative agent of tuberculosis

Many plants contain biologically active substances that have antimicrobial properties and are able to suppress the growth of Mycobacterium bacteria. tuberculosis. For example:

1. Garlic (*Allium sativum*): known for its powerful antibacterial and anti-inflammatory properties due to its allicin content.
2. Turmeric (*Curcuma longa*): contains curcumin, which has anti-inflammatory and antioxidant properties.
3. Licorice (*Glycyrrhiza glabra*): has an expectorant and anti-inflammatory effect, which helps relieve the symptoms of tuberculosis.
4. Echinacea (*Echinacea purpurea*): strengthens the immune system and increases the body's resistance to infections.
5. Aloe vera (*Aloe vera*): stimulates tissue regeneration and has an antibacterial effect.

The Main Benefits of Herbal Medicine

1. Improving the general condition of the body: Herbal preparations help restore strength, which is especially important for patients with chronic forms of tuberculosis.
2. Reducing the side effects of medications: Chemotherapy for tuberculosis often causes side effects such as nausea, allergic reactions and liver dysfunction. Herbal remedies help to alleviate these phenomena. Of particular importance is the use of these plants in patients with tuberculosis in combination with active hepatitis, or when the inflammatory process in the liver is still completely complete. It is at this time that hepatoprotectors of plant origin can prevent the side effects of anti-tuberculosis drugs and make it possible to carry out high-quality chemotherapy.
3. Strengthening the immune system: Weakened immunity is one of the factors that contribute to the development and progression of tuberculosis inflammation. The immunomodulatory properties of plants help the body fight infection more effectively.
4. Anti-inflammatory action: Many medicinal plants reduce inflammation in the lungs, promoting faster recovery of the lung parenchyma and reduction of osteal lesions and fibrosis after completion of treatment.

In clinical practice, herbal medicine can be used in various forms, including infusions, decoctions, extracts and herbal teas. For example, St. John's wort infusion, rosehip decoction and teas with the addition of chamomile and mint are widely used to support lung function and strengthen the body.

Recipe for herbal tea to support the lungs:

Coltsfoot leaves – 2 tablespoons.

Linden flowers – 1 tablespoon.

Rose hips – 1 tablespoon.

Brew with 1 liter of boiling water, leave for 30 minutes, strain. Take 200 ml 3 times a day.

Scientific research in the field of herbal medicine

Numerous studies have confirmed the effectiveness of herbal medicine in tuberculosis. For example, one study showed that the use of garlic in the diet of

patients with tuberculosis helps to shorten the treatment time and improve lung function. Similarly, curcumin has been shown to reduce inflammation and have a protective effect on lung tissue.

Limitations of herbal medicine: Despite its many benefits, herbal medicine cannot completely replace traditional tuberculosis treatment. It should be considered solely as an adjunct to complex therapy. In addition, the use of medicinal plants requires an individual approach and consultation with a specialist to avoid possible allergic reactions and interactions with medications.

The authors have created collections of herbal preparations used in patients with severe, dry, hacking coughs in those newly diagnosed with tuberculosis, as well as a collection for patients with chronic forms of tuberculosis, when patients are bothered by the secretion of thick, purulent sputum.

Conclusion: Phytotherapy plays an important role in the treatment of tuberculosis, especially in combination with traditional treatment methods. The use of medicinal plants helps to improve the general condition of patients, strengthen the immune system and reduce the side effects of drug therapy. However, to achieve the best results, further scientific research is needed and standardized schemes for the use of phytotherapy in clinical practice are developed.

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