ACUPUNCTURE Today

HERBAL MEDICINE

Herbs for Boosting the Immune System

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Q: I have a four year-old daughter who has just started attending preschool. She has not been very healthy, and I am afraid that she is going to get sick every time there is a flu. What can I do to boost her immune system?

A: One of the most important emphases of Chinese medicine is prevention. Herbs are commonly prescribed during a change of season to help a person adapt to the changing weather. By planning ahead and taking herbs accordingly, one can drastically reduce the frequency and severity of catching the common cold or the flu.

According to traditional Chinese medicine, defense (*wei*) *qi* is located at the exterior surface of the body and offers initial protection against foreign or pathogenic factors. When *wei qi* is strong, pathogenic factors cannot penetrate the body. When it is weak, a variety of infections can occur.

Prevention of infections relies on normal function of *wei qi*. From the Western perspective, many herbs that tonify *qi* enhance the immune system. Herbs that perform such functions include astragalus (*huang qi*), ganoderma (*ling zhi*) and cordyceps (*dong chong xia cao*).

Astragalus (*huang qi*) is one of the most frequently used Chinese herbs and has historically been used to tonify *wei qi*. It fortifies the lungs, strengthens the wei qi and indirectly protects against external pathogenic factors.

In terms of Western medicine, modern research has confirmed repeatedly that astragalus increases both specific and non-specific immunity.[1,2,3] In a clinical trial of 115 leucopenic patients, astragalus was found to be associated with an "obvious rise of the white blood cell (WBC) count" with a dose-dependent relationship.[4] In addition, astragalus works well with concurrent drug therapy in enhancing the overall effectiveness of the treatment. It also potentiates the anti-tumor effect of chemotherapy drugs[5] while reversing drug-induced immune suppression.[6] Lastly, astragalus demonstrates anti-cancer activity by increasing the content of camp and inhibiting the growth of tumor cells.[7]

Ganoderma (*ling zhi*) has been traditionally used to tonify blood and vital energy. It is thus essential in rebuilding a patient's constitution.

Ganoderma increases the number of white blood cells and inhibits the growth of various viruses and bacteria associated with the flu. It has been demonstrated to enhance the immune system in various clinical studies. The specific effects of ganoderma include an increase in monocytes, macrophages and T-lymphocytes.[8-11] There is also an increased production of cytokine, interleukin, tumor necrosis factor and interferon. Furthermore, ganoderma has a broad spectrum of antibacterial activities, inhibiting the growth of pneumocci, streptocci (type A), staphylococci, e. coli, b. dysentarie and pseudomonas, among others.[7]

Cordyceps (*dong chong xia cao*) has traditionally been used in chronic debilitated patients. It is an excellent herb to tonify the kidney yin and yang and improve overall bodily constitution. Cordyceps is another herb which has marked immunomodulatory functions. It enhances overall immunity by increasing lymphocytes and natural killer cells and the production of interleukin, interferon and tumor necrosis factor.[12-16] Cordyceps was also found to significantly inhibit the proliferation of cancer cells;[17] in some instances, the growth inhibition rate of the cancer cells reached between 78-83%.[18]

Keep in mind that while these herbs are effective individually, they should be prescribed in the content of an herbal formula to enhance synergistic action and minimize possible side-effects.

Q: Are there any contraindications for these herbs?

A: Astragalus, ganoderma, cordyceps and herbs that boost the immune system are contraindicated for patients taking immunosuppressants such as imuran (azathioprine) or sandimmune (cyclosporin). These drugs are commonly prescribed following organ transplant surgery to suppress the immune system and prevent tissue rejection. Because these herbs have potent immune enhancing effects, they should not be prescribed for patients taking immunosuppresants following organ transplant surgery. Despite their weak constitution, use of some immune enhancing herbs can increase the risk of rejection and severely compromise the patient's health.

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