

Natural Plant-Red Sage Root and Anti-cancer

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Cancer is one kind of diseases that results in high mortality for human being nowadays. It is a unresolved medical problem facing to all the medical workers in the world. Due to the unavoidable side effect and toxicity of chemotherapy and radiotherapy, there is no specific drug for many cancer cases till now. So people have been trying to look for new drugs and ways to treat and prevent cancers. Because of the superiority of natural plant resources, people look for help from the nature and pay more attention on it to develop the new way to treat cancers. Among the number of natural plants, Red sage Root(RSR) is typical one now.

RSR is also called *Miltiorrhizaem* with bitter taste, slight cold in characteristic and is grouped under the drugs of Heart and Liver Meridian own to its antitusive effect in Heart and Liver disease according to Traditional Chinese Medicine(TCM) theory.

RSR is often applied in the treatment of diseases of department of internal medicine, gynecology and neurology, etc. Recently it appears in the field of cancer treatment and gets more and more attention and concern.

According to TCM theory, cancer belongs to the field of stagnation and is related to the stagnation of Qi and Blood. RSR is the representative natural plant that can promote blood flow and remove blood stasis has been concerned, studied and researched both in clinic and laboratory.

In the clinical treatment for cancer, doctors often apply RSR with Milkvetch Rood(Radix Astragali), etc.

to patients with long-course and weak resistance, it can strengthen the body resistance, promote blood flow, eliminate blood stasis and reduce the masses with good effect. It is also good for patients with deficiency of blood and qi as well as lower body resistance and poor appetite after receiving chemotherapy and radiotherapy. RSR assisted with other materia medica tonifying qi and blood can improve symptoms and body resistance.(1) it is also found in clinic, RSR can raise effect of treatment of liver cancer by protecting liver cell, promote generation of liver cell and improve micro-circulation of the liver.

It is suggested(2) that liver perfusion with compound RSR injection to treat 20 cases with liver cancer after receiving chemotherapy can improve several biochemistry indexes, reduce mass and improve symptoms. The total effective rate is 65%, the survival rate of one year is 35%, that of two years is 10%, which is much better than that of contrast group.

RSR injection is applied to 23 cases with pain syndrome due to liver cancer(3) with good result. By the way of phleboclysis with RSR injection(20-40mg/day x 15days), 15 cases of cancers in late stage with pain syndrome is treated, there are 5 cases of liver cancer among of them, the relieving rate is 93.3% without side effect(4). So it suggested that RSR has positive effect on reliving pain syndrome due to cancer

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in clinic.

In the laboratory, it is found(5) RSR can inhibit the growth of cancer cells, induce differentiation as well as prevent liver cancer in fixed degree during the test on mouse. It is found that RSR ketone can inhibit growth of cancer cell, induce differentiation. Its mechanism probably is inhibiting synthesis of DNA of liver cancer cells, stopping it into S period, then inhibit growth of cancer. It is also found(6) that extracted solution of RSR has effect of stopping precancerous lesion on experimental mouse.

The extract tablet of RSR is distributed to 595 male farmers with fixed dosage in one area with high incidence of liver cancer(7) in southern of China, meanwhile the contrast group of 513 people is given placebo. Then the follow-up survey of 5 years showed that the effect index of the test group is 1.70, the protection rate is 40%, and the dangerous rate of suffering liver cancer is much lower than that of contrast group. So it is considered that mechanism of preventing liver cancer maybe due to antioxidation of RSR in the body.

DISCUSSION

In the clinic, medical workers have been getting more and more knowledge about RSR and other kind of natural plants in the field of anti-cancer. Except the RSR, a large number of natural plants is also choose to treat cancers. Such as: Oldenlandia, Flavescent Sophora Root, Barbat Skullcap, Arisaema Tuber, Lucid Ganoderma, Giant Knotweed Rhizome, Centipeda

Herb, Tongking Sophora Root, Black Nightshade, Asparagus Root, Selfheal Spike, Zedoary Tumeric, Green Chiretta, Japanese Thistle, Field Thistle, etc.

During the treatment of esophagus cancer, stomach cancer, liver cancer, cervix cancer and breast cancer, RSR is an important drug. It is not only because of its anti-cancer effect, but also slight side effect.

According to modern pharmacology, clinical application of RSR has just slight side effect. There are few cases with digestive tract reaction, which can disappear by itself. Occasionally few case shows increased period amount, which can be recovered after stopping taking RSR. So we can say that RSR is worth of further developing and researching. It is very important to know and understand its mechanism and effect of every parts of RSR, which can guide the effective clinical treatment in future. It is also good for developing the same kind of natural plants, which can promote blood flow to remove blood stasis.

It is emphasized in TCM that diagnosis and treatment should be based on overall analysis of symptoms and signs. Because the characteristic of RSR is promoting blood flow to remove blood stasis, so the key on the clinic is stagnated blood. Its main clinical manifestations are fixed distention and tenderness in local area with stabbing pain, purple of the tongue or tongue with ecchymosis. So it is contraindicated to cases without sign of blood stasis as well as the cases with trend of hemorrhage.

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