

Evidence-based Traditional Chinese Medicine (TCM) and Breast Cancer Treatment

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Abstract: With the development of Western medicine treatments of breast cancer, the adverse reactions resulted from these treatments have been attracted more attention. TCM treatment has unique advantages in avoiding adverse reactions. Combining Traditional Chinese medicine (TCM) and Western medicine to enhance the treatment efficiency is a good choice for patients suffered from breast cancer. Recent evidence indicates that the application of herbs, energy treatments, acupuncture as well as diet will achieve a good clinical treatment and prognosis.¹ Therefore, a comprehensive care plan on the basis of physiology modification, psychospiritual treatment, symptom control, and immunity enhancement are available for the patients to improve their life quality and the five-year survival rate. This report presents a patient with breast cancer who achieved long-term survival after TCM treatment, providing evidence that this strategy may be clinically useful.

Keywords: Breast cancer; Traditional Chinese medicine

1. Introduction

From the perspective of the Western medical, breast cancer is an abnormal or clonal cell that grows out of control of the environmental constraints and has the abilities to invade the other tissues.^[1] The primary treatment for breast cancer is applying aggressive or destructive treatments including surgery, chemotherapy and radiotherapy to annihilate the tumor cells. In most clinical cases, the oncologist provides the mastectomy, chemotherapy and radiotherapy to annihilate the tumor cells and to prevent the proliferation of tumors. However, there are some limitations of applying these treatments. For example, patients received chemotherapy may suffer from a lot of side effects including fatigue, vomiting and nausea. In TCM, the formation of breast cancer is considered to be losing balance of the entire network of the patients' body-mind.^[2] Therefore, some evidence indicates that if the network of their body-mind can be strengthened or rebalanced, resolving the cancer for those patients may be achieved. In addition

2. Case Report

Lily is a 48-year-old mother of two children who was diagnosed with a cancer in the right breast cancer. She was offered a surgical excision of the lump in the Affiliated Hospital of Nantong University, along with the removal of lymph nodes in the axilla, followed by routine chemotherapy and radiotherapy. Alternatively she could have had a mastectomy, but she wished to preserve her

natural breast. She was anxious about having surgery and obsessed whether she had made the correct decision. Her friend suggested that she consulted with an experienced practitioner of Chinese Medicine named Dr. Lo.

3. Roles of TCM in Breast Cancer Therapy

3.1. Modification of tumor physiology

More evidence indicates that TCM herbs may favorably alter the tumor cell response to the therapy of the western medical. In addition, extensive research and meta-analyses have been investigated to prove that TCM herbs have a lot of pharmacological effects.³ These TCM herbs have a considerable number of chemicals, which may suppress the division of cancer cells, increase the immune cells, enhance the apoptosis process, and minimize a lot of side effects caused by chemotherapy. Furthermore, some TCM herbs are able to prevent multidrug resistance. In the view of TCM, the tumor is tightly connected with the stagnation of blood or qi. Qi can be acted as a model for the transformation of the energy or the cellular information. It has been demonstrated that more blood and fluid stagnate in the malignant cancers and the weakened blood circulation causes the short of oxygenation in this tumor site. The efficiency of radiotherapy and chemotherapy will be reduced if the tumor cells live in the poor oxygen environment. In TCM, detoxification herbs can help the patients to circulate the qi and blood properly of the malignant cancer. Interestingly, anti-coagulant including heparin, aspirin and warfarin can be

viewed as adjuvant therapies to chemotherapy, have been proved to inhibit the metastases through the blood in vivo studies.⁴ In this case, we may find that Dr. Lo always focus on strengthen Lily’s qi and reduce the excess liver fire by taking some herbs, this suggestion may provide according to the evidence that detoxification herbs can help the patients to circulate the qi and blood properly of the malignant cancer.

3.2. Immunity enhancement

Herbs. Balancing the energy for the organs to strengthen the entire body-mind system can improve the treatment efficiency of cancers. This treatment may be used to correct the imbalance of the body-mind system, causing an enhancement and improvement in immunity. This treatment is also called Fu Zheng treatment and is mediated through the use of Fu Zheng herbs including Rx Astragali, Cordyceps sinensis, Rx Ginseng and so on.⁵ In china, combining the herbs with radiotherapy or chemotherapy is reported to be a good treatment to improve survival for patients suffered from cancer. Clinical researches with 2 randomized trials discovered that the amounts of NK and

OKT4 cells increased by using Fu Zheng herbs.⁵ Some Chinese researches indicates that tissue healing may be improved and ulcers caused by radiation will be decreased if we use the Fu Zheng herbs that containing Anti-inflammatory constituents.⁵ In this case, Dr. Lo gave some energy treatment to relax her and improve her immunity indicate that Immunity enhancement and energy balance are important in TCM treatment for cancers. Besides, according to Dr. Lo’s suggestion, Lily tried a patent Chinese herb formula called Chemo-support TM (see Appendix A) to take during the chemotherapy and a formula called Radio-Support TM (see Appendix A) for the radiotherapy. Besides, she also took low dose aspirin to prevent the blood clots. These supportive cares helped Lily reduce the side effects of chemotherapy and radiotherapy. The results of the treatment indicate that combining the herbs with radiotherapy or chemotherapy is a good treatment to improve survival for patients suffered from cancer. However, some effective standards and quality controls are still required to verify these studies.

Table 1. Appendix A

| Chemo-supportTM(content) | Radio-SupportTM(content) |
|---------------------------------|---------------------------------|
| Radix Astragali | Radix Angelicae Sinensis |
| Radix Codonopsis | Radix Polygoni Multiflori |
| Radix Ophiopogonis | Fructus Lycii |
| Radix Angelicae Sinensis | Radix Astragali |
| Rhizoma Pinelliae | Flos Carthami |
| Fructus Ligustri Lucidi | Radix Pseudostellariae |
| Poria Cocos | Fructus Schisandrae |
| Radix Pseudostellariae | Fructus Ligustri Lucidi |
| Fructificatio Ganodermae Lucidi | Rhizoma Anemarrhenae |
| Rhizoma Dioscoreae | Radix Paeoniae Albae |
| Radix Panacis Quinquifolii | Radix Glycyrrhizae |
| Cortex Moutan | |
| Rhizoma Polygonati | |
| Rhizoma Phragmitis | |
| Pericarpium Citri Reticulatae | |
| Radix Glycyrrhizae | |

3.3. Symptom control

If someone suffered from a cancer, he will experience a lot of symptoms including the symptoms caused by cancer and some side effects caused by different therapies. Although the cancer cured by the clinical, the patients may still be influenced by the late therapy side effects. For instance, radiation-therapy may lead to xerostomia, ulcer of the patients’ skin and trismus. Those side effects will influence the life quality and cannot effectively be controlled by the clinical. TCM treatments play an important role in the symptom supportive care for patients suffered from cancers. General systemic symptom including pain, poor appetite, depression, fatigue, and some

specific symptom including myelo suppression, gastrointestinal symptoms will be controlled effectively. Patients receiving chemotherapy have high possibility to form gastrointestinal symptoms (diarrhea, vomiting, nausea) and myelo-suppression. They seem more likely to feel fatigue and have a poor appetite. In TCM, chemotherapeutic agents are leading to the deficiency of Spleen and Kidney causing a general decline in the blood or qi.⁶ Clinical chemotherapy or Radiotherapy serves as “heat toxins”, which is harmful to qi and yin. “Deficient Spleen qi” is expressed as diarrhea while “Heart fire” is manifest as stomatitis.⁶ Chemotherapy medicines “interfere Spleen or Stomach qi”, manifested as harm to the lining of gastrointestinal.⁶ Those expressions are inevitably along

with some mood disorders (insomnia, depression), and constitution alterations (poor concentration, fatigue). After the comprehensive evaluation conducted in the interference in the network of patients' body-mind, some applications of acupuncture, Qigong, herbs and nutrition therapy may be useful for the therapies. By history taking, tongue and pulse examination, Dr. Lo's conclusion indicate that Lily had an energy deficiency and an extremely weak spleen associated with a history of diarrhea and bloating. Therefore, she gave Lily some treatments include nutrition therapy (promote the spleen qi), herb therapy (boost spleen essence) and acupuncture therapy (tonify his kidney). The relief of symptom by Dr Lo's treatments may prove that TCM play an important role in the symptom control process.

3.4. Acupuncture

Acupuncture therapy at the specific acupoint P6 has been demonstrated to improve the anti-emetic efficacy of medicines for perioperative or chemotherapy-caused vomiting or nausea.⁷ A randomized single blind controlled experiment has verified the consequence that acupuncture is an effective therapy method for relieving the symptom of vomiting or nausea.⁷ In this case, Dr Lo suggested that Lily receive the acupuncture therapy at the specific acupoint P6 to prevent nausea and vomiting. The results of the treatment may indicate that the high anti-emetic efficiency of P6 acupuncture. However, a randomized controlled experiment carried recently couldn't verify the effects of controlling chemotherapy-caused nausea in female patients suffering from breast cancer.⁸ This consequence may owe to the greatest effect of anti-emetic drugs. Therefore, acupuncture therapy supplied little advantage over these drugs alone.¹ However, in a recently retrospective research carried by Royal Marsden Hospital, acupuncture was applied in the treatment of 183 cancer suffers with radiation-caused ulceration, malignant pain and iatrogenic pain.¹⁸ 2% cancer suffers obtained an improvement by acupuncture therapy. ¹In addition, increased amounts of blood caused by the acupuncture treatment may promote the healing of ulceration. We advise that acupuncture can be integrated with other therapies to increase the efficiency of pain control.

The life quality of the patients may be influenced by some side effects caused by the late treatment. Radiation-caused xerostomia is a bothersome side effect observed in those patients receiving radiation therapy that influenced parotid glands, leading to the loss of appetite and difficulty swallowing or speaking. Acupuncture therapy can promote the regeneration of the tissue and increase the amount of blood of parotid glands. ¹Another application of acupuncture treatment is to relieve the symptom of hot flushes caused by the anti-cancer hormone treatment. ³ uncontrolled group studies were carried. One in male castrated due to prostate cancer, others in female taking

tamoxifen due to breast cancer. The results indicate that there is a decrease in the vasomotor symptoms. ⁹A systemic administration by the acupuncture treatment at SP6 has shown a long-term reduction of symptoms. In this case, acupuncture treatment reduced the hot flashes associated with early menopause and suppressed Lily's irritability, indicating that acupuncture therapy is a good choice for the relief of hot flashes.

4. Psycho-Spiritual Interaction

Psycho-spiritual plays an essential role in TCM. Those practices including Qigong, therapeutic touch and polarity therapy are based on the psycho-spiritual interaction. ¹The doctor laying-on his hands at a specific distance from the cancer suffer, with a positive intention to heal. The specific "energy field" of the cancer suffer will be estimated or detected when there exist some disturbance. The doctor will balance and reduce the disturbance with his hands, and then he will apply "external energy" to treat unbalanced energy field. A lot of researches have been applied to assess the effects of the practice and have verified that therapeutic touch may decrease pain or anxiety for dying patients. ¹In the PBL case, Dr Lo took the energy treatment to relax Lily and Lily felt calm and loved. The results of the energy treatment may indicate that therapeutic touch may play an important role in treating unbalanced energy field and relaxing the patients. However, some meta-analysis has verified that the positive effect of the therapeutic touch is not obvious due to the low effect ratio (around 0.39).

Qi gong and tai chi are proved to influence our physiological processes including electromagnetic alterations in a scientific way. These practices may encourage patients to ameliorate mood, boost the immune system, and reduce therapy-related side effects. ¹ In this case, Lily practiced Qigong to increase their energy level may support that Qi gong may influence our physiological processes. Although past researches have compared alterations of different parameters comparing tai chi and normal aerobic exercise, researches cannot demonstrate that there are some differential influences between mind-body activity and normal exercises. However, some randomized trials indicate that tai chi is useful for the old individuals, cancer survivors and people who suffered from cardiovascular diseases¹⁰.

5. Conclusions

Now, more and more novel evidences prove that TCM acted as a supportive care may play a critical role in the cancer treatment process. Besides, sufficient preliminary evidence may promote more clinical trials to assess the effects of combining TCM treatments with western cancer treatments. At present, some evidences indicate that the application of TCM in the treatment of cancer is very promising, but some randomized clinical trials should be

applied in different clinical scenarios to acquire trustworthy data. We hope that evidence-based TCM treatments with a psycho- spiritual experience or personal belief-systems can be applied into personal treatment plan. Assessment of processing strategies, life quality, functional maintenance should be taken into consideration of the treatment. We believe that the integration of TCM treatment into the whole cancer therapy process will improve the survival and life quality of cancer sufferers.

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