

Critical Review and Case Reports on the Effect of Acupuncture and Traditional Chinese Medicine in Cancer Care

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ABSTRACT

Although traditional Chinese medicine (TCM) has been widely used in China and other East Asian countries for helping cancer patients and clinical research is strongly supporting the use of it, it is not available to most patients who are treated on the NHS in the UK, due to the fact that there is not enough evidence for using TCM in cancer patients.

This paper is trying to establish the evidence base for using TCM in cancer patient management. The authors reviewed the currently available clinical reports regarding TCM treatment of cancer patients – mainly those of randomly assigned and controlled clinical trials (RCTs) with bigger samples – for maintaining the quality of life, enhancing the immune system, remedying the side effects from radiotherapy and chemotherapy respectively, and propose a role of TCM as an assistant therapy to the mainstream therapies. Four clinical practice cases in the UK, diagnosed as cancer by the mainstream, are also included. They were successfully treated with TCM with the patients surviving in a stable state. In addition, the treatment mechanisms of TCM are explored.

The conclusion is that TCM, although not powerful enough to combat most cancers on its own, still holds a unique value in maintaining good quality of life, with helping patients through operation, chemotherapy and radiotherapy to achieve better outcomes. Furthermore, it might help patients survive longer even when the cancers are not eliminated.

Keywords: Traditional Chinese medicine, cancer, quality of life (QOL)

INTRODUCTION

Cancer treatment is one of the most difficult challenges for medical and healthcare services. Advances in science and technology have made significant improvements in the understanding and diagnosis of cancer. It is now possible to diagnose a cancer case in its early stages and remove it completely, therefore cure it. However, when cancer is not found in the early stages, the prognosis can still be dismal and many might eventually die of it.

Both medical professionals and patients are not satisfied with currently available treatment regimens which rely on surgical

operation if possible, followed by either chemotherapy and/or radiotherapy, which both have serious side effects. TCM has been applied in conjunction with the mainstream medical procedures to treat cancer, or occasionally used as the main treatment method for the past five decades, and some very promising outcomes have been reported.

However, it is rare that patients have the choice to add TCM to the overall management of their cancer treatment in the UK.¹ As a complementary medicine TCM has not been included in the provision of the National Health Service (NHS) in the UK and most patients treated on the NHS do not have the choice to select it.² This limitation might be based on information from research done many years ago and this might not reflect developments in recent years. Meanwhile, many acupuncture practitioners in the UK have reported that they treated patients with cancer and the results were very promising.³ It is a situation that needs clarification.

Can TCM be a valuable therapy in helping patients suffering from cancer? And if so, what can TCM do and in which area could TCM demonstrate its advantage? These are the questions the researchers/authors aimed to answer. Thanks to the unique position of being able to access rich research information from both English literature and Chinese reports, some new evidence is examined to provide possible answers.

The situation regarding TCM in the treatment of cancer is currently very different in Western societies. In East Asian societies TCM plays an important role. Defined by national laws, TCM retains its position as a mainstream medical service, which allows practitioners to work in all aspects related to cancers, from diagnosis to treatment and long-term monitoring, with full medical duties. Therefore, medical practitioners can use TCM measures alongside biomedical procedures in combined treatment protocols. This model of service seems to be universally accepted by all patients; no questions regarding this status have been raised. This allows the TCM practitioners to maximise the possible application of TCM with their cancer patients. Research projects have been funded by central governments and local health institutions in various areas and many herbal medicine products are tested from laboratory to clinical trials. Some treatment protocols based

on TCM studies have shown better results than conventional treatments and won international prizes for their success.⁴

SURVEYS ON THE PREFERENCE FOR TCM FROM PATIENTS WITH CANCER

A survey on cancer patients' attitude to CM in Hong Kong was carried out by Lam et al⁵ in Baptist University: A total of 786 participants from three Chinese medicine clinics and one oncology clinic were interviewed with a structured questionnaire. 42.9% used Western medicine (WM) only; 57.1% used at least one form of CM; 5% of participants used CM only; 56.5% used TCM before, during and after WM treatment. The most popular treatment regimen was that of using chemotherapy in combination with TCM herbs (63.3%). Nearly one-third (N=274) did not tell their physicians about using Chinese medicine and over two-thirds (68.2%) believed that integrated and Chinese medicine was effective. Lam et al concluded that cancer patients in Hong Kong considered integrative TCM and WM to be an effective cancer treatment.

Similar findings were reported among the Asian populations in USA, Canada, Singapore and Australia.⁶⁻¹⁰ The studies revealed a high level of expectation amongst cancer patients of TCM when part of their treatment. The reasons were also analysed. They were thought to be mainly related to the cultural background, the education received and the social circumstances. It was generally agreed by the researchers that knowing TCM is the key for people to choose the use of TCM together with conventional medical treatment. The researchers suggest that there is a strong need for and expectation of TCM among all patients to help them achieve better results. Strong demands from government, insurance provision and the patient population are main driving forces for promoting the use of TCM.

Fifty-six patients (86%) used CAM for cancer treatment. The two commonest categories were spiritual practices (48%) and traditional Chinese medicine (TCM) (37%). Significant factors in TCM use were being male ($P = 0.007$) and having advanced disease ($P = 0.045$). Overall 60% of patients using herbal treatment and 97% of patients using spiritual practices expected a cure, a longer life, symptomatic relief, improved immunity or a better quality of life. Satisfaction with Western treatment correlated positively with satisfaction with CAM (Spearman's rank correlation coefficient = 0.4). Forty-six patients (71%) did not discuss their CAM use with their oncologists and 64% obtained advice from their friends or families. Fourteen patients refused previous Western treatments (eleven feared its side effects (79%), five preferred CAM (36%)).

Wong et al¹¹ in Singapore did a survey of 65 consecutive patients in an Asian oncology department, by using a modified and translated instrument capturing information on patients' characteristics, CAM use, treatment refusal and satisfaction. Fifty-six patients (86%) used CAM for cancer treatment. The two commonest categories of CAM therapies were: Doing spiritual practices (qigong) (thirty-one patients, 48%) and taking traditional

Chinese medicine (twenty-four patients, 37%). They discovered that overall 60% of patients who were using Chinese herbal treatment and 97% who were using *qigong* expected a cure, a longer life, symptomatic relief, improved immunity or a better quality of life. Satisfaction with Western treatment correlated positively with satisfaction with CAM (Spearman's rank correlation coefficient = 0.4). Fourteen patients (21%) refused previous Western treatments (eleven feared its side effects (79%), five preferred CAM (36%)). This study highlights the prevalence of CAM practices among Asian radiotherapy patients, their high expectations of the outcome and the need for better doctor-patient communication.

REVIEW ON CLINICAL REPORTS REGARDING TCM IN CANCER MANAGEMENT

1. To raise the quality of life

Que et al¹² proposed a system to assess the quality of life for those patients under TCM treatment which measures the severity of many symptoms and signs. By summarising their clinical observation, they suggested that the TCM application on cancer should be a multiway, multilayer and multitarget integrated treatment characterised by 'survival with tumour' and improvement of life quality. An ideal result of the TCM therapy for cancer should be a positive response of the patient with satisfactory quality of life (QOL) and longer survival time.

Lin et al¹³ observed the effect of TCM in improving QOL of patients with non-small cell lung cancer (NSCLC) in III or IV stage. A total of 294 patients in six hospitals were randomly assigned into three groups: 99 in the TCM group treated with TCM according to disease and syndrome differentiation, 92 treated in the Western medicine (WM) group with chemotherapy, and 103 treated in the integrative group with combined therapy of TCM and chemotherapy. Six items, physical status, social/family status, communication with physicians, emotional status, functional status and additional concerning status, were investigated and analysed by using Functional Assessment of Cancer Therapy-Lung (FACT-L). Their conclusion was that TCM has some effects on inhibiting adverse reactions to chemotherapy, i.e. it can ease or reduce the side effects produced by chemotherapy, and that it can improve the QOL of patients.

Tao et al¹⁴ researched the survival benefit of using TCM syndrome differentiation treatment for elderly patients over 70 with stage II or III colorectal cancer in Shanghai. A total of 78 cases were included in this study, with 37 cases in the integrated treatment (TCM and WM) group and 41 cases in the WM group. They showed that there was a significant difference between the two groups ($P=0.012$). The 1-, 2-, 3-, 4-, and 5-year cancer-free survival (DFS) rates of the WM group were 87.7%, 69.6%, 63.4%, 46.5%, and 29.6%, respectively. The 1-, 2-, 3-, 4-, and 5-year DFS rates of the integrated therapy group were 100%, 86.3%, 74.6%, 74.6%, and 74.6%, respectively. Their conclusion was that TCM syndrome differentiation and treatment is important for improving the prognosis of stage II or III colorectal cancer in elderly patients.

Integrated treatment shows benefit for reducing relapse and metastasis rates and prolongs survival for elderly patients.

2. To improve the immune response

Wang et al¹⁶ observed the regulatory effect of the Bushen Jianpi Recipe (BSJPR) on cellular immunity of patients with primary liver cancer of *gan shen yin* deficiency and *pi qi* deficiency syndrome type after intervention therapy. The project was a multicentre randomised controlled trial. After transcatheter arterial chemo-embolisation (TACE) 117 patients were assigned to two groups: 60 in the treated group (treated with BSJPR) and 57 in the control group (treated with a liver protecting remedy (silymarin and vitamin C)) for twelve weeks. Changes in QOL, immediate effect on tumour size and survival time were observed. The cellular immune function was also observed, including the T-lymphocyte response determined by 3H-TdR, expression of MHC class I/II and B7 molecule detected by FACS, and interleukin 10 and 12 (IL-10, IL-12), interferon-gamma (IFN-gamma) tested by ELISA.

In the treated group (BSJPR) after treatment, the efficacy for improving TCM syndrome reached 73.33% (44/60 cases), their half-year survival rate being 83.33% (50/60 cases), while those in the control group were 52.63% (30/57 cases) and 70.18% (40/57 cases) respectively. A significant difference was shown between the two groups ($P < 0.05$). The patients' quality of life (QOL) was improved in the treated group, with no obvious adverse reaction. However, the clinical benefit rate in the control group (92.7%, 51/55 cases) was higher than that in the treated group (78.0%, 46/59 cases, $P = 0.035$). Laboratory examination showed increases of MHC class II (CD14+/HLA-DR) expression on monocyte surface as well as IFN-gamma and IL-12 production in the treated group. The researchers believe that using BSJPR together with TACE could enhance patients' cellular immune function to elevate the clinical curative effect on primary liver cancer.

Chan et al¹⁶ in St Mary hospital in Hong Kong carried out a double-blind placebo-controlled randomised trial with immunological monitoring to evaluate the use of traditional Chinese medicine in improving QOL, reducing chemotoxicity and modulating immune function in women undergoing chemotherapy for ovarian cancer. The results showed no significant difference in terms of QOL between the TCM group and non-TCM group. However, those in the TCM group showed less damage to the immune system. Less neutropenia, less decrease in lymphocyte counts and cytokine activities were found in the blood tests.

3. To minimise the side effects of radiotherapy and chemotherapy

Liu et al¹⁷ in Taiwan examined the effectiveness of TCM for liver protection and completion of chemotherapy among patients with cancer receiving chemotherapy. They used a case-control design to examine the medical records of patients with cancer who received chemotherapy in a teaching hospital in Taipei in 2004. A total of 184 courses of chemotherapy among 89

patients were studied. In 42 cases TCM was used jointly with chemotherapy while the remaining 142 cases served as controls. Outcome variables included counts of cancelled or delayed chemotherapies and liver function tests (AST and ALT) one week before, during and two weeks after chemotherapy. Patients who had concomitant TCM with chemotherapy had lower serum ALT and AST levels during chemotherapy compared to the controls. However, there was no significant difference between the groups regarding the odds of completing one course of chemotherapy.

Wong and Sagar¹⁸ worked on chemotherapy induced peripheral neuropathy (CIPN) which occurs in 10 to 20% of cancer patients treated with neurotoxic chemotherapy. A mixture of sensory, sensorimotor and autonomic nervous system dysfunction can occur, resulting in deterioration in function and worsened QOL. They reported the result of a pilot prospective case study of five patients treated with an acupuncture protocol that aims to correct *qi*, Blood and *yang* deficiencies and directs *qi* and Blood to the extremities, with the goal of improving the symptoms of CIPN. The responses were encouraging.

4. To treat the complications during the peri-operative period and promote the rehabilitation of patients after operations

Tan et al in Singapore reported that TCM has been used successfully during the peri-operative period to relieve intestinal obstruction, reduce postoperative ileus and reduce urinary retention after rectal surgery. Good results have been reported in the treatment of the complications of chemotherapy and radiation enterocolitis. Favourable results have also been shown in the use of TCM either alone or in combination with chemotherapy to treat advanced colorectal cancer. Molecular studies have shown some TCM compounds to reduce tumour cell proliferation and induce apoptosis. Although the reported results of TCM have been exciting thus far, problems of lack of consensus on treatment regimens and questions on the reliability, validity and applicability of published studies prevent its widespread use. They suggest that there is now an urgent need for colorectal surgeons to work with TCM physicians in the continuing research on this area so as to realise its full potential for our patients in the future.

5. To ease the pain

Zhu et al¹⁹ studied available case reports and proposed an evaluation scheme to measure the pain reducing effect with the use of external TCM herbal therapy to relieve the pain caused by cancer. Different types of cancer pain must be distinguished and treatment should be applied according to such a differentiation. The assumption is that external TCM therapy is effective and can be widely used in many hospitals.

Chen et al²⁰ summarised case reports in this area ten years before 2008. The conclusion was that acupuncture is effective and safe in the treatment of cancer pain. However, better guidance and further studies are needed to improve its effects.

Wu et al²¹ introduced a tested herbal recipe, Aitongping capsule (ATP), which is a TCM herbal remedy designed to relieve cancerous pain. Sixty cancer patients were randomly divided into two groups, 30 patients in the TCM group took ATP and 30 patients in the control group took Diclofenac. One week of treatment was applied. The relevant clinical conditions of cancerous pain, the content of plasma beta-endorphin (beta-EP) and c-AMP, hemorheological index, improvement of quality of life (QOL) and occurrence rate of adverse reactions were observed before and after treatment. The total effective rates in the TCM group and in the control group were 90% and 83.3% respectively, which showed no real statistical difference. However, there were significant differences between the two groups in aspects of numbers of pain episodes, pain bearing time and the initiation time of analgesic action and prolonged analgesic duration, the decrease of tenderness and percussion pain, the increase of plasma beta-EP content and the decrease of cAMP ($P < 0.05$ or $P < 0.01$). There was evidence that the ATP group performed better in improving QOL, ameliorating hemorheological indexes and reducing incidences of adverse reactions compared to the control group ($P < 0.05$ or $P < 0.01$). The conclusion was that ATP has an affirmative effect on cancerous pain. Its analgesic effect may be associated with the increase in plasma beta-endorphin content, the decrease in cAMP levels and the amelioration of hemorheological indexes.

CASE STUDIES ON CANCER MANAGEMENT WITH TCM IN THE UK BY THE AUTHORS

The authors have been practising in the UK at various clinics for over 20 years and many patients approached the author for help with their suffering, including cancer patients. Many of them were treated with TCM whilst receiving conventional therapies, and while having big problems after chemotherapy and radiotherapy. It is difficult to produce a full picture of how many cases may have concluded successfully due to the limited access to patients' full medical histories.

The following four cases are examples which demonstrate the benefit of TCM in cancer management.

Case 1: Suspected cancer of the pancreas disappeared after an operation and a TCM treatment

Mr H, 59 years, engineer, first visited our clinic for upper abdominal pain. He was suspected to have pancreatic cancer by conventional WM, as he had constant upper abdominal pain, and a solid tumour was found at the head of the pancreas, confirmed by ultrasound, MRI scan and blood tests. An operation was scheduled to follow in three weeks. Because of his unbearable pain he visited the author for relief. He also manifested nausea, poor appetite, weight loss, loose bowel movement and exhaustion.

Key clinical findings included weight loss, painful facial complexion and slight jaundice. He appeared to have pain at the right and central upper abdomen without rebound pain, muscular tenderness and abdominal distension. He had a light red tongue

with tooth marks and a white coating, plus a wiry-tight pulse. Acupuncture and herbal medicine were administered to move stagnant abdominal *qi*, to eliminate Blood stasis and to calm down the *yang*.

The patient visited our clinic the following week reporting a 50% reduction of pain. The jaundice had disappeared. The same treatments were given and the pain continued to reduce in the following weeks. After the operation he was told that a tissue mass had been found at the head of his pancreas, so a part of his pancreas had been removed. No chemotherapy and radiotherapy were offered. He was continually given regular acupuncture and herbal medicine to treat his mildly raised sugar levels following the operation until his completely recovery (treatment briefing is listed in appendix one).

Case 2: Suspected liver cancer, confirmed by a liver biopsy, was found to be benign neuroendocrine tumours during an operation after three years of TCM treatment

Ms B, 45 years, secretary, had been diagnosed with primary liver cancer, confirmed by ultrasound, blood tests and a liver biopsy. She had suffered from breast cancer 13 years prior, but the liver malignancy was thought to be an unrelated primary. There were multiple tumours, the largest one measuring 6x7 cm, the smallest one measuring 1x1 cm, concentrated around the portal vessels, making the resection difficult and dangerous. Hence no doctor referred her for operation and other treatments. As she had received some benefit from TCM during her treatment for breast cancer in the past, she returned for treatment with us for helping her with the liver cancer.

On her first visit she complained of nausea, loss of appetite, loose bowel movement, poor sleep, extreme exhaustion and depression. Other clinical findings included: weight loss, distended abdomen with puffiness at the upper right abdomen, mild tenderness over the liver region where solid masses could be palpated. The top level of her liver appeared one inch higher than normal and the lower level could be palpated two inches below the right bottom rib. No jaundice or oedema could be found. She had a light-red tongue with less white coating and a wiry-fine pulse.

Regular acupuncture and various herbal formulas were given. External herbal anticancer patches were put over the local area, decocted herbs were prescribed to strengthen the quality of life (QOL) and to correct all of her unwanted symptoms. She was treated regularly with TCM for more than two years. Although she gradually appeared to have good wellbeing and QOL, her liver tumours did not contract. It was suggested that she should see a hepatobiliary surgeon and an experienced consultant decided to operate on her. Neuroendocrine tumours, confirmed to be benign by histology, were found during the operation and they were successfully resected (treatment summary in appendix two). After another course of TCM treatment for relieving her severe post-surgery complications she recovered completely and went back to work.

Case 3: Suspected leukaemia diagnosis was taken off after TCM treatment

Mr M, 69 years, retired officer, came to see the author and told her that raised immature white blood cells and platelets had been found in his blood. He was diagnosed with suspected leukaemia and was advised to wait three months for a further examination to confirm it. He hoped and expected that TCM could give him support during this stage.

His other symptoms were lethargy, restlessness, insomnia, some bruising at his legs and nasal bleeding, which occurred occasionally. A treatment regimen for acupuncture and herbal medicine was designed for correcting the syndrome he showed. He was also advised to take a bigger daily dose of vitamin C. He gradually improved, with less lethargy, better sleep, less bruising and his nasal bleeding stopped. He was taken off the suspected leukaemia diagnosis after three months. He also stopped his TCM treatment at that time.

However, his symptoms and blood accounts were aggravated again after five years. Chronic myeloid leukaemia was diagnosed and a course of oral chemotherapy was given. He went back to taking herbal medicines to increase his general energy levels and to correct all of his unwanted symptoms. He confirms the benefit to his treatment from Chinese herbal medicine (treatment summary in appendix three).

Case 4: Suspected ovarian cancer used only TCM and CAM treatment for ten years, keeping patient in a good condition with tumours disappeared

Ms E, 46 years, musician, visited the clinic with solid tumours in the right abdomen. She had lost weight and it was found that the tumours in her lower right abdomen had gradually increased. Various blood tests, ultrasound and an MRI scan were performed and ovarian cancer was suspected. She refused any further treatments which the gynaecologist consultant offered her and upheld her confidence in exercising her *qigong*, which could not contract her tumours. Hence, she was referred to try TCM as a stronger treatment, with herbal medicine and acupuncture.

Other complaints were loss of appetite, bloated abdomen and exhaustion. She was very slim (her BMI was below normal), she had a flat abdomen with remarkable tumours that could be palpated in the right abdomen, the top level of which reached the horizontal line of the umbilicus, solid and fixed tumours. She had a light-red tongue with little coating and a wiry-fine pulse.

Regular acupuncture and herbal decoctions were given, tailored to treat her condition according to her particular stage over a two-year period. This was followed by intermittent treatments, designed according to her general condition and to what she could financially afford, for more than ten years. The author checked her in early May 2011, now 59 years old, still slim, but no tumours could be palpated in her abdomen. She feels easily tired,

yet she is able to do full-time work, and she was able to bring up her son and daughter. She is keeping up with her daily *qigong* exercises (treatment summary in appendix four).

DISCUSSION ON TCM'S ROLE IN CANCER TREATMENT

Generally speaking, the factors involving a decision of providing some service in a healthcare system are: public demand, efficacy, cost-effectiveness, practicality and, finally, the safety measures against potential risks. Both government bodies and private providers follow the same principles.

The UK NHS has followed three principles regarding the nature of its service from when it was set up in 1948:

- that it should meet the needs of everyone
- that it should be free at the point of delivery
- that it should be based on clinical need, not the ability to pay

These principles have guided the development of the NHS and have remained at its core for 70 years.² The evaluation of medical procedures and therapies is carried out by an independent institution, the National Institute for Health and Care Excellence (NICE).

From the literature review (see above) it is easy to see that there is patient demand. Not only Chinese patients but also many UK patients know that TCM could help, and many public institutions increasingly recognise that acupuncture can help conditions suffered by those with cancer. The Royal Marsden NHS Trust²² stated on its website information page: 'Acupuncture can be helpful for people who experience symptoms such as pain, nausea, dry mouth, hot flushes, fatigue and breathlessness.'

However, little is known by the public about the advances in Chinese herbal medicine in the area of cancer management. If patients were to receive enough information about TCM herbal therapy in the management of cancer, the demand for it might be considerable. This is demonstrated in the author's case reports, as all four patients had a pretty clear idea about what they were suffering, and all of them took the decision to use TCM for their own reason. Given the choice, many patients will try TCM herbs for their beneficial effects.

Cost-effectiveness is not a problem at all, as TCM does not use expensive equipment or very costly drugs. The studies, including those of the management of migraine and lower back pain, all demonstrated TCM and acupuncture to be cost-effective, to be cheaper than other conventional ways of management. The safety issue is not of real concern either, as both acupuncture and herbal medicine have been consistently shown to demonstrate a safe practice record.

So, the only remaining issue is that of clinical excellence, the question whether they can be proved to be effective or at least equal to commonly used conventional medicines. There are many

clinical trials and many systematic reviews available on various subjects. The evidence for using TCM could be established, if suitable research projects were funded. The remaining hurdle is the attitude towards TCM. The professional bodies and researchers should work together to demonstrate the advances and the progress achieved worldwide, to spread the news to help change the attitude. The authors consider the following points to be a major issue the profession could emphasise, to convince the public and the policy makers to take notice of the possible benefits that TCM could bring.

Strengthening of the patient's own repairing and healing power, to encourage the maintenance of a normal condition. TCM places great emphasis on the body's own repairing system. If the system is robust, good health can be maintained and illness can be repelled. TCM believes that the most important job is to re-establish a system to promote the body's own capacity to heal itself. This is an area where TCM has an advantage, as it deals not only with illness, but also looks after the wellbeing of the whole system.

Repairing the damaged immune system of patients with cancer and preventing complications. The immune system is seriously damaged in patients with cancer and this was observed and widely reported by many TCM clinical observations. And it is well known that most cancer patients die of the complications rather than the cancer they were suffering from. The weakened immune system is largely responsible for many

of the complications and therefore the poor quality of life. Chemotherapy and radiotherapy and their side effects are all causative factors in bringing down the system, as reported in many cases. The cancer cells have been killed, but the already compromised immune system has suffered further damage due to those therapies. Reports from both clinical trials and laboratory tests have confirmed that many TCM herbal medicines and acupuncture can significantly help to rebuild the immune system.

CONCLUSION

The time has come to re-evaluate TCM's role in the treatment of cancer. TCM appears to have a weaker effect in killing cancer cells by comparison to conventional Western medicine, but its treatment principles are positive and have been shown to have the capacity to have a transformative effect on cancer cells. Some patients, while living with cancer, maintain a good quality of life (QOL) with the support of TCM. At the end of life, it may also be some patients' preference that the emphasis of treatment should be on maintaining QOL rather than just killing cancer cells with the complication of worse symptoms in the aftermath. TCM, although not powerful enough to combat most cancers on its own, still holds a unique value in maintaining good QOL, with helping patients through operation, chemotherapy and radiotherapy to achieve better outcomes. Furthermore, it might help patients surviving longer even when the cancers were not eliminated.

TEXT REFERENCES

- ¹ **NHS Choice.** (2013). *Principles and values that guide the NHS.* Available online at <http://www.nhs.uk/NHSEngland/thenhs/about/Pages/nhscoreprinciples.aspx> last visited on 8th July 2013.
- ² **Department of Health.** (2013). *The Handbook to NHS Constitution (2013).* London: Department of Health (UK).
- ³ **Chen, S. and Zhang, L.** (2001). *New concepts and tendency on cancer's treatment in comprehensive treatment on cancers with integrated conventional western and traditional Chinese medicines,* pp.665-734. Beijing: People Health Publishing House.
- ⁴ The National Foundation for Cancer Research (NFCR) announced in January 24, 2012 in BETHESDA, Maryland that Dr Zhen-Yi Wang and Dr Zhu Chen have been awarded the 7th annual Szent-Györgyi Prize for Progress in Cancer Research for their innovative research that led to the successful development of a new therapeutic approach to acute promyelocytic leukemia (APL). *GP-TCM Newsletter* 2012, Feb, 1.
- ⁵ **Lam, Y.C., Cheng, C.W., Peng, H., Law, C.K., Huang, X., Bian, Z.** (2009). Cancer patients' attitudes towards Chinese medicine: a Hong Kong survey. *Chinese Medicine*, Dec 30; 4:25.
- ⁶ **Liu, C.H. et al.** (2011). Cancer patients' experience of combined treatment with conventional and traditional Chinese medicine: A biopsychosocial phenomenon. *Cancer Nurse*, Mar2.
- ⁷ **Watt, L. et al.** (2011). Perceptions about complementary and alternative medicine use among Chinese immigrant parents of children with cancer. *Support Care Cancer*, Feb.12.
- ⁸ **Tan, K.Y. et al.** (2008). The role of traditional Chinese medicine in colorectal cancer treatment. *Technique in Coloproctology*. Mar; 12(1):1-6.
- ⁹ **Sagar, S.M. and Wong, R.K.** (2008). Chinese medicine and biomodulation in cancer patients – part one. *Current Oncology*, Jan; 15(1):42-8.

- ¹⁰ **Oh, B et al.** (2010). The use and perceived benefits result from the use of complementary and alternative medicine by cancer patients in Australia. *Asia-Pacific Journal of Clinical Oncology*, Dec; 6 (4):342-9.
- ¹¹ **Wong, L.C. et al.** (2010). Complementary and alternative medicine practices among Asian radiotherapy patients. *Asia-Pacific Journal of Clinical Oncology*, Dec, 6(4), 357-63
- ¹² **Que, H.F. et al.** (2005). Discussion of relationship between quality of life and clinical effect assessment of malignant tumour treated with traditional Chinese medicine. *Zhong Xi Yi Jie He Xue Bao (Journal of Integrated medicines)*, Jul 3(4), 253
- ¹³ **Lin, L.Z. et al.** (2006). Effect of traditional Chinese medicine in improving quality of life of patients with non-small cell lung cancer in late stage. *Zhongguo Zhong Xi Yi Jie He Za Zhi (Journal of Integrated Chinese Medicine and Western Medicine – Chinese Version)*. May; 26(5):389-93.
- ¹⁴ **Tao, L. et al.** (2010). Clinical study on survival benefit for elderly patients with resected stage II or III colorectal cancer based on Traditional Chinese Medicine syndrome differentiation and treatment. *Zhong xi yi jie he xue bao (Journal of Integrated medicine)*, Dec: 8 (1), 1159-64.
- ¹⁵ **Wang, W.H. et al.** (2008). Regulatory effect of Bushen Jianpi recipe on cellular immunity of patients with primary liver cancer after intervention therapy. *Zhongguo Zhong Xi Yi Jie He Za Zhi (Journal of Integrated Chinese Medicine and Western Medicine – Chinese Version)*. Jul; 28(7):583-87.
- ¹⁶ **Chan, K.K. et al.** (2011). The use of Chinese herbal medicine to improve quality of life in women undergoing chemotherapy for ovarian cancer: A double-blind placebo-controlled randomized trial with immunological monitoring. *Annals Oncology*, Oct; 22(10):2241-49.
- ¹⁷ **Liu, M.L. et al.** (2009). Effectiveness of traditional Chinese medicine for liver protection and chemotherapy completion among cancer patients. *Evidence Based Complementary and Alternative Medicine*, Nov.7.
- ¹⁸ **Wong, R. & Sagar, S.** (2006). Acupuncture treatment for chemotherapy-induced peripheral neuropathy—a case series. *Acupuncture in Medicine*, Jun; 24(2):87-91.
- ¹⁹ **Zhu, S.J. et al.** (2011). Clinical evaluation of the efficacy of external therapies of traditional Chinese medicine in treatment of cancer pain. *Zhong xi yi jie he xue bao (Journal of Integrated Medicine)*. Jan9 (1), 11-14.
- ²⁰ **Chen, Z.J. et al.** (2008). Advances of clinical study on acupuncture and moxibustion for treatment of cancer pain. *Zhongguo Zhen Jiu (China Journal of Acupuncture and Moxibustion)*, May; 28 (5):392-94.
- ²¹ **Wu, M.H. et al.** (2005). Clinical study on Aitongping capsule in treating cancerous pain. *Zhongguo Zhong Xi Yi Jie He Za Zhi. (Journal of Integrated Chinese Medicine and Western Medicine – Chinese Version)*, Mar; 25(3):218-21.
- ²² **Royal Marsden NHS Trust.** (2013). *Acupuncture*. Available online at <http://www.royalmarsden.nhs.uk/diagnosis-treatment/treatment/complementary-therapies/pages/acupuncture.aspx>

APPENDIX

1. Case study one

Dan Jiang's general treatment to Mr H:

Acu-points: Du 20 *bai hui*, Ren 15 *jiu wei*, Ren 12 *zhong wan* and Ren 6 *qi hai*, St 25 *tian shu*, St 36 *zu san li* and St 44 *nei ting*, LI 4 *he gu*, Sp 6 *san yin jiao*, GB 34 *yang ling quan* and GB 41 *zu lin qi*.

Herbal prescription: *chai hu* 10, *chuan lian zi* 10, *yan hu su* 10, *e zhu* 10, *san leng* 10, *zhi shi* 10, *hou po* 10, *zhu ling* 30, *wang bu liu xin* 10, *bai shao* 30, *san qi* 6, *wu yao* 10, *zhi gan cao* 5 were decocted as juice, taken twice daily with minor variation at each visit.

2. Case study two

Dan Jiang's general treatment to Ms B:

Acu-points: Du 20 *bai hui*, Ren 12 *zhong wan*, Ren 10 *xia wan*, St 16 *ying chuan*, St 15 *wu yi* (avoid straight and deep needling, use 45-degree angle) and St 36 *zu san li*, Liv 13 *zhang men* and Liv 3 *tai chong*, TH 6 *zhi gou*, GB 34 *yang ling quan* and GB 41 *zu lin qi*.

Herbal prescription: *huang qi* 20, *dan gui* 10, *bai zhu* 10, *fu ling* 10, *zhu ling* 15, *e zhu* 10, *san leng* 10, *gui zhi* 10, *wu yao* 10, *chuan jiao* 10, *ling zhi* 10, *bai shao* 15, *zhi gan cao* 5 were decocted as juice, taken twice daily.

External plaster for anti-cancer was ordered from a private cancer hospital in China (with some particular anti-cancer substances).

3. Case study three

Dan Jiang's general treatment to Mr E:

Acu-points: Du 20 *bai hui*, Ren 17 *shan zhong*, St 36 *zu san li*, Sp 9 *yin ling quan*, Sp 6 *san yin jiao* and Sp 4 *di cang*, Ki 1 *tai xi* 3, Ki 6 *zhao hai* and Ki 7 *fu liu*, P 6 *nei guan*, Ht 7 *shen men*; Liv 3 *tai chong*.

Patent herbal medicine: Ganoderma spore powder (1 sachet) and ginseng extraction (1 tube), both taken twice daily.

4. Case study four

Dan Jiang's general treatment to Ms E:

Acu-points: Du 20 *bai hui*, Ren 3 *zhong ji* and Ren 6 *qi hai*, St 27 *da ju*, St 29 *gui lai* and St 36 *zu san li*, Sp 9 *yin ling quan* and Sp 6 *san yin jiao*, Ki 10 *yin gu*, Ki 7 *fu liu*, Ki 6 *zhao hai* and Ki 3 *tai xi*, TH 5 *wai guan*, GB 41 *zu lin qi*, Liv 3 *tai chong*.

Herbal prescription: *gui zhi* 10, *fu ling* 10, *zhi shi* 10, *hou po* 10, *e zhu* 10, *dl long* 10, *wang bu liu xing* 10, *yi mu cao* 10, *tao ren* 10, *hong hua* 10, *da huang* 10, *chi shao* 10 and *gan cao* 5 were decocted as juice, taken twice daily, with some variation at each visit according to her condition.