Treatment of Bladder Carcinoma with Oriental Medicine — PART ONE

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Treatment of some bladder cancers by the use of Traditional Chinese Medicine/Oriental Medicine (OM) may prove to be equal and in some cases may prove to be superior to current standard models of cancer therapy. OM may be most beneficial to patients who refuse standard allopathic care, mainly those who have cancer contained within the inner bladder wall and with minimal muscle invasion. Stage I and II refusing cystectomy. See Table 1 for bladder tumor staging guidelines1. This writing should serve to expose the powerful therapies OM has to offer with respect to cancer treatment. I will outline the basic microscopic and macroscopic components necessary for the proper treatment of bladder carcinoma. I do not wish to imply that this is a complete study of the use of Oriental Medicine for this condition and the reader is encouraged to utilize the recommended readings listed at the end of this article as well as seek advanced clinical training in the treatment of carcinomas.

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A brief overview will be presented of both the Eastern and Western methods of bladder cancer assessment and treatment. In part one of this paper a case will be presented where the patient has chosen to avoid the use of standard-conventional western medical treatments. In part two, an equitable clinical case will be presented where the patient has refused surgery but wishes to use Oriental Medicine to protect his vital energy and too enhance the actions of select chemotherapies.

Terms used to identify doctors of Chinese Medicine who specialized in the treatment of swellings and ulceration was recorded in the Chinese classic, Zhou Li, dating around the 12th century B.C.2 According to this text, physicians, Yang Yi (ulceration doctors), were assigned to the treatment of ulceration and swellings (Zhong yang), necrosis and ulceration (Kui yang). The study of Zhong yang and Kui Yang is known as Zhong Yang Xue. The term Zhong Yang Xue is still used today in China, Korea and Japan by doctors of Oriental Medicine.

Ancient Oriental medical records categorize tumors as either zhong yang or chuangle yang (lesion or ulceration). The main term covering cancer "like" conditions in Oriental Medicine are yin (glandular enlargement), liu (tumor), yan (rock), jun (fungus), zheng (substantial mass), jia (insubstantial mass), ji (localized mass) ju (mobile mass), yi ge (hiccup) fan wei (gastric regurgitation), chang tan (firm and immovable mass), pi kuai (distention and fullness due to mass), xuan pi (cord-like swelling), kui (lesion and ulcer), au hao (poisonous impetigo), fan hua (flower-like hemorrhoids), xi ruo (polyph), you zhi (warts and moles), zhui (growth), e rou (vicious flesh), and rou liu (myoma). All these names share some similarities with western medicine’s discussion of certain cancerous conditions, especially in their early stages.

Bladder carcinomas are usually (90%) transitional cell (urothelial) with most types presenting as single/non-diffuse papillary cancer3. Squamous cell types, usually high grade and the most aggressive type of bladder cancer, account for about 8% of bladder cancers3. Carcinoid tumors, Adenocarcinoma, sarcomas and lymphomas present with little frequency. Carcinoma in situ (CIS) usually appears as normal bladder mucosa or as slightly raised red patches. CIS can usually be located, through biopsy, in what appears to be healthy tissue in most bladder cancer patients. About 20% of cancer patients with untreated CIS will not develop invasive disease, the remaining 80% of those who develop invasive diseases have a poor prognosis leading to mortality when compared to those receiving conventional allopathic therapies3. The effectiveness of Oriental Medicine as a mono-therapy for bladder cancer or by comparison with conventional medicine remains unknown and warrants immediate study.

The incidence of bladder cancer in the United States per 100,000 cases of carcinoma is 16.2. Men account for 27.7 and women 7.4 with an associated mortality of 5.5 and 1.7 respectively. Further exploration of statistical studies regarding cancer may be found through the National Cancer Institute's website for clinical trials4. It should be noted that this data is reflective of those with symptomatic disease and who have engaged conventional treatments. These figures are not reflective of those using OM as a means of primary cancer treatment or those who have asymptomatic disease.
Etiology

Exogenous pathogens appear to be a key promoter of cell pathology in disease patterns associated with bladder cancers. The exploration of exogenous pathogens has remained the main focus of modern cancer study. This is changing rapidly within the western science fields of genetics and immunology. Western science has failed to acknowledge the depths that OM has to offer with respect to endogenous factors, as a cause of disease, mainly related to Chinese Medicine’s Zhang Fu theory of organ function. According to Oriental medical theory, the main causative factors for the incidence of tumors and their pathological mechanism are due to Qi, Blood, Phlegm, Toxins, and Deficiency, respectively.

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The incidence of certain kinds of tumors is associated with the Invasion of Toxins. Oriental Medicine purports that carcinomas are closely associated with entrance of Evil Toxins. The Six Eternal Pathogens or Evil Qi are the main external causes of the development of cancer, Wind, Cold, Heat, Summer Heat, Dampness and Dryness. If these Six Qi become disturbed, which means either Excess or Deficient, or the resistance of the human body becomes lowered, the Six Qi may serve as the causative factors of disease, in which case they are called the Six yin (or abuses). As stated in the NEI JING, "Tumorous diseases are the result of Invasion of the Channels and Collaterals by the Eight Winds." It is also noted that: "When Cold Qi invades the Intestines and combats with the Wei (defensive) Qi, the Ying is impeded. As Qi supplies the nourishment, jia (an immovable lump) develops and adheres to the flesh. This further causes the arousal of Evil Qi and the arising of growth. Right from its beginning, these can be as big as an egg..."

This quotation implies that Evil Qi is capable of causing tumors or tissue ulceration in the human body. Based on present clinical experience, what is meant by the Six Evils in Oriental Medicine approximates what is meant by pathogenic organisms in modern medicine, such as bacteria, viruses, and parasites, as well as physical and chemical carcinogens and their effect upon the human body. Modern science makes some attempt to implicate some congenital factor through genetics but it lacks the macroscopic depth that is found in the OM concept of acquired and post-natal organ function with respect to disease etiology and progression.

Epidemiological evidence has identified that aromatic amines are related to a substantial increase in the incidence of bladder carcinoma. These chemicals are used as intermediates in many products in making leather, paint, and rubber products. Other suspect causes have been identified as smoking, pelvic irradiation, and schistosomum haematobium infection. Additionally, the drug cyclophosphamide dramatically increases the risk for bladder cancer. Sodium saccharin, sodium cyclamate and phenacetin have also been associated with bladder cancer formation in non-human animals.

OM pathological mechanisms associated with tumor incidence are related to Qi, Blood, Phlegm, Toxins and Deficiency respectively. Endogenous pathogens such as the disturbance of the Seven Emotions, dietary irregularity, physical exhaustion and acquired factors resulting in Qi and Blood deficiency should be given equal merit when developing an understanding of exogenous factors related to the formation of and each specific type of carcinoma.

Diagnosis

Patients presenting with hematuria or other corresponding symptoms, and who have failed to respond to standard treatment protocols, should be referred to a urologist to rule-out or rule-in extensive urinary or renal disease. Hematuria presents in about 90% of patients with bladder carcinoma. Bladder irritability occurs in about 25% of patients and may be mistaken for prostatitis or cystitis. Post-voiding pelvic discomfort, dysuria, polyuria, and hesitancy should serve as suspect symptomology causing the physician to rule out bladder cancer. Traditional pulse and tongue diagnostics as well as dermatitis, focal discoloration, and other visible stagnations located on meridians or alarm points that may be associated with western biomedical renal diseases and is clinically sufficient to warrant further diagnostic studies. However, the absence of OM clinical indicators, such as found with the tongue and pulse, should not circumvent the subjective discourse provided by the patient. Complaints of flank pain, often with radiation between sacral acupuncture points and Liver 14, as well as edema in the genitalia or lower extremities may indicate advanced disease.

Imaging studies may be helpful and may assist with directing proper referral but should not be used as a method of determining local invasion or tumor staging. Bimanual examination through the rectum should be performed by a urologist during cystoscopy. Biopsy and histology are used to predict survival and direct allopathic therapies. Urography, urine cytology, bladder tumor antigen (BTA), matrix protein 22 (NMP-22), and telomerase activity are also needed to assess for bladder cancers but as with imaging studies, they should not replace cystoscopy with bimanual rectal exam.

Acupuncturists, where scope-of-practice allows, should perform routine laboratory studies to include: CBC, renal and liver function tests, urinalysis, and serum alkaline phosphate or transaminase levels. Variations in these tests may indicate advanced disease and hasten patient access to specialty medical services in areas were advanced specialty care is triaged and/or difficult to obtain. Tissue biopsy obtained via cystoscopy is used to determine bladder muscle invasion and too direct allopathic treatments.
Treatment

OM providers who treat bladder cancer should have a competent group of physicians as an integral part of any patient's care team. Tumor staging and evaluation should be performed by a urologist who will accept a patient's desire to choose his or her treatment options. It is also suggested that a board-certified medical oncologist be consulted to better facilitate appropriate diagnosis and treatment of any cancer patient. Most importantly, patients should be given the appropriate information to make an informed decision about their Oriental medical care options. Practitioners should ensure that a proper legal informed consent instrument is developed specifically for those seeking a competent plan of Oriental medical treatment.

Westerners who diagnose and treat with eastern medicine should continually evaluate their treatment rational to avoid diagnosing or treating disease apart from the complex patterns/relations experienced by all patients. Deficiency injuries of the Zhang Fu, exogenous or endogenous, should direct the development of treatment protocols developed by Oriental Medical doctors. Reduction therapeutic principles used in western medicine should be avoided. To address an exogenous factor without proper acknowledgement of endogenous pathological patterns, or visa versa, may result in diminished clinical efficacy and allow or even promote disease progression.

OM treatments used in the treatment of bladder cancer, although complex, need not be problematic for the OM practitioner. Most rules that commonly apply to the application of modalities such as acupuncture, dietary therapy, point injection and botanical medicine, should be applied based on the systems theory used, and thus directed by an appropriate OM diagnosis. Western biomedical information should also be incorporated when using botanicals and especially when given with chemotherapies or prior to surgery and/or radiation therapies. It is important to note that the treatment of bladder cancer is not much different than treating other cancers with OM, but its rate of recurrence is quite high. Correcting the internal cause of toxic accumulation in the bladder may prove to prevent recurrences.

Radical cystectomy, and lymph node dissection in men and women is suggested to all those found to have invasive tumors as well as those who have superficial tumors with CIS. Transurethral resection of bladder tumors, segmental resection, and intravesical drug or biological therapies may also be presented as options depending upon histological findings. Mortality rates associated with cystectomy are between 1% and 3%. Most patients who seek OM treatment as an option do so in attempt to avoid cystectomy; seeking a better quality of life than that associated after surviving this procedure. Radiation therapy is often offered to patients who refuse surgical intervention. Superficial low-grade tumors may be treated with topical biological or chemotherapeutic agents. Systemic cytotoxic and radiation therapies are used in both focal and advanced stages of bladder cancer.

Oriental medical treatment of bladder cancers should be directed towards removing pathogenic dampness and heat from the Lower Burner. Botanical drugs are the best method of removing pathogenic heat. Pathogenic Heat that moves from the Intestines, Large or Small, can invade the urinary bladder resulting in an Excess Syndrome. Presenting hematuria with pain is usually associated with pathogenic heat from the Large Intestine; hematuria without pain is usually associated with heat accumulation in the Small Intestine. A functional understanding of a patient's associated hematuria should direct the correct selection of botanical agents; those that drain heat from the Large Intestine vs. the Small Intestine respectively. Dampness should be addressed by insuring proper drainage without compromising Yin fluids or Vital energy. This pattern is closely associated with the more erosive types of bladder cancer.

Bladder cancer associated with an insufficiency of vital energy is usually related to that of the Kidney and Spleen. This results in the improper flow of fluids, thus poor toxin removal, and a lack of control of the blood. Lack of Vital energy is more
closely related to bulky or mass forming types of bladder cancer. Botanical drugs should be selected that supplement the Vital energy while allowing for the proper removal of toxins. Strong herbal tonics should be avoid if possible since some, such as Panax Ginseng, may promote the proliferation of some types of tumors. Acupuncture combined with non-electrical thermal therapies like moxabustion may be most beneficial for patients with toxic accumulations resulting from patterns of deficiency. Both excess and deficiency patterns result in the improper voiding of the bladder resulting in toxic accumulation and the release of an excessive amount of protective Qi. Halting the progression of, or curing bladder cancer, may result from the appropriate removal of toxic accumulations of heat and dampness, but failure to apply long term treatment that addresses the Qi, Blood and Yin, and Vital energy of the patient will likely result in disease reoccurrence. Clinical experience has shown, as with chemotherapies, that the effectiveness of direct therapies like those used in the removal of toxic heat may become less effective with each subsequent use.

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Patients who choose to treat their cancer with OM may also wish to use standard allopathic therapies in concert. Using OM as a mono-therapy as opposed to an adjunct therapy will dramatically affect the course of OM treatments utilized by the physician. As mentioned above, I will present two different case presentations that will show, by example, how doctors of OM may develop a rational treatment plan that is partly directed by the treatment choices made by the patient.

Case Study

In September of 2001, an aggressive bladder cancer treatment program was designed for a 45-year-old female. This patient had recently been diagnosed with a high-grade papillary epithelial carcinoma. Biopsies were obtained from the base, and the right and left sidewalls of the bladder and respectively indicated focal invasion into the lamina propria; muscularis was present. Urine cytology indicated high-grade urothelial carcinoma. This patient’s recent chest x-ray, as well as her routine laboratory finding, were negative. The patient had also undergone, prior to biopsy, intravenous pyelogram (IVP) that was reported as normal indicating that the chance of current involvement of the kidneys and ureters was unlikely. The patient refused modern surgery, chemotherapies and radiation. Furthermore, this patient refused any further radiology studies due to her fear of radioactive exposure. Photos of the right and left bladder walls prior to treatment (Images 1a and 1b respectively) were taken before instituting Oriental medical treatment. Both of these photos indicate the presence of toxic heat eroding the tissues and are sufficient to warrant the aggressive treatments prescribed.

The patient complained of having symptoms of interstitial cystitis (IC) since age 4 and a dramatic increase of these symptoms beginning around 1998. She also presented with a long history of recurrent bladder infections followed by systemic candida following the use of antibiotics. This patient stated that her IC symptoms had become so severe that any form of mental anxiety or physical stress made her condition near unbearable. Sexual intercourse caused severe pain. Other significant complaints that should be noted were: heavy hematuria, polyuria, nocturia, and burning before, after and during urination.

A western exam was performed and all systems, except as stated above, were found to be within normal limits. The patient had no history of environmental factors associated with the promotion of this disease. The patient’s face was sallow in hue and her emotional presentation was comprised of frustration, worry and anger. Her nails and hair were normal and her skin appeared well hydrated. Her pulses were taken based on Traditional Chinese Medicine’s method of pulse diagnosis. Her Kidney (chi-left and right) pulses as well as her Spleen/Stomach (quan-right) pulses were absent. Her Lung (sung-right) pulse was bounding and full with a resting heart rate of 110. A slight alternating vibration was noted when the Lung pulse was palpated at a deep level. Her tongue was unremarkable and appeared with normal bearing.

The Eight Principle theory was applied to this patient’s presentation. Observation, auscultation-olfaction, interrogation and palpation indicated heat in both the exterior and interior with Ying level insufficiency combined with Qi and Yang deficiencies of both the Spleen and Kidney. A Sa-Sang constitutional diagnosis was made, Shaoyang, so to better understand this patient’s possible path of disease etiology and progression. Shaoyang disease is closely related to this constitution but the symptomology used to describe the principles of Six Stages/three yin-three yang diagnosis should not be confused with this system of constitutional diagnosis.

Her syndrome being mixed, combined with her Shaoyang constitutional diagnosis, (Large Lung and Small Kidney) led to a poly-prescription that allowed for the draining of toxic heat lodged within the Bladder, presumably from the Large and Small Intestines, while providing for the proper astraining of Yin fluids and Qi tonification. Once we have insured that toxic heat has been adequately removed from the Bladder we will institute botanical therapies to prevent reoccurrence of this pattern.

Her IC was immediately resolved within two weeks after our initial treatment; consisting of appropriate acupuncture and Chinese herbal medicine. The patient’s Vital energy returned within one month of treatment. Pulses, with the