Western Use of Chinese Herbs for Common Urologic Conditions

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Abstract

Chinese herbal options for urinary-tract infections (UTIs), benign prostatic hyperplasia (BPH), and chronic prostatitis are reviewed. Chinese equivalents of these conditions are described, and various Chinese herbs and formulas used to treat the conditions are discussed.

Two Marvel Powder (Èr Miāo Sǎn) and its components, Phellodendron amurense (Amur corktree, huáng bǎi) and Atractylodes lancea (black atractyloides, cāng zhú) are discussed with respect to treating infectious cystitis. Eight Herb Powder for Rectification (Bā Zhèng Sǎn) is also discussed for helping patients who have UTIs. Ephedra, Aconite, and Asarum Formula (Mā huáng fù zī xīn tāng; mao-bushi-sasishin-tō in Japanese) is also mentioned for addressing antibiotic-resistant UTIs. Enrich the Kidneys and Open the Gates Pill (Zī Shèn Tōng Guān Wán), Saxifraga stolonifera (strawberry saxifrage), and Ganoderma lucidum (língzhī, reishi, manentake) are discussed with respect to their roles in helping patients who have BPH.

Particular attention is given to differentiating subtypes of chronic prostatitis, and some evidence is provided showing that this helps to choose the proper therapy, at least as far as Chinese herbal formulas are concerned. Four formulas (two traditional and two modern) are discussed in detail for various types of chronic prostatitis: (1) Eight Treasure Powder or Decoction (Bā Zhēn Sǎn); (2) Reaping Mixture (Ài Kě Hé Jì); (3) Bupleurum Powder to Dredge the Liver (Chái Hú Shū Gān Sǎn); and (4) Black Colt Capsule (Xuán Jū Jīaō Náng). Finally, Rehmannia Eight (Bā Wèi Dì Huáng Wán; Hachimi-jio-gan in Japanese) is discussed as an adjunct to trimethoprim–sulfamethoxazole antibiotics.

Introduction

Three common urologic conditions, urinary-tract infection (UTI), benign prostatic hyperplasia (BPH), and chronic prostatitis, are clinical problems in the developed and developing worlds. ¹ Despite the availability of medications for treating these conditions, they can become recurrent or chronic and sometimes are not well-managed by these medications. Another issue is that a substantial portion of patients experience adverse effects from the medications, although most of these effects are minor. In some cases, surgery becomes necessary—an expensive option that has its own risks. Therefore, additional preventive and therapeutic options are needed for these conditions.

Traditional Chinese Medicine (TCM) has been developing herbal treatments for patients with these three conditions for thousands of years. Although not referred to by their current Western pathologic names, the symptom complexes of these conditions have all been recognized since antiquity, and treatments have been developed to help relieve patients who have these problems. This article reviews some treatments that have survived to modern times and that have been the subject of clinical trials, at least beginning the process of scientifically validating their historical value.

The current authors believe that, in general, prevention and treatment with herbs should begin with local resources and not exotic herbs shipped from distant geographical regions. Nonetheless, information about exotic herbs is valuable for two reasons. First, it is beneficial to have herbal backup treatments for those occasional cases when local herbs do not work. Second, it shows that there is scientific support for the efficacy and safety of yet another group of herbs for another set of conditions, contradicting the impression that all herbal treatment successes are anecdotal. When selecting Chinese herbs, it is important to know their sources and to confirm that these herbs have been tested for identity and purity, given that there are known problems with contamination and adulteration with some products and some companies.

Whenever possible the complete Mandarin Chinese names are provided including tones, but, unfortunately, this information was not always available for every formula or herb.

Eric Yarnell, ND, RH (AHG), and Kathy Abascal, BS, JD, RH (AHG)
Urinary-Tract Infections

The syndrome that most closely resembles a UTI in Chinese medicine is Damp-Heat in the Lower Jiao (also called the Lower Burner or Lower Heater). The concept of Jiao preceded the later Chinese conception known as Zang Fu organs and is mentioned in the > 2000 year-old core text of Chinese medicine, the Yellow Emperor’s Inner Cannon, compiled sometime between 475 BC and 220 AD. None of these descriptions corresponds exactly to anatomical organs. The Lower Jiao includes the Zang Fu organs of the Small and Large Intestines, the Kidneys, and the Urinary Bladder. The symptoms of Lower Jiao Damp-Heat include urinary urgency and frequency, pain on urination, fever, shivering, and lower abdominal pain.

Two Marvel Powder

Two Marvel Powder (Èr Miāo Sǎn) is a common formula used for treating UTIs. It contains 9 g each of two herbs, Phellodendron amurense (Amur corktree, huáng bǎi) dry-fried bark and Atractylodes lancea (black atractylodes, cǎng zhú) fried prepared root. Prepared black atractylodes root is usually wild-crafted (unlike cultivated white atractylodes or bái zhú, Atractylodes macrocephala). After harvesting, atractylodes root is soaked in rice water and then steamed until it turns black.

The formula was first described in the text Essential Teachings of (Zhu) Dan-Xi (Dān Xī Xīn Fǎ) by Zhū Zhèn-Hèng, also known as Zhū Dān-Xī, written in 1481 AD. The two herbs are considered to be somewhat opposite one another, as Amur corktree is bitter and cooling while black atractylodes is pungent and warming. In truth, the formula was originally recommended to be taken with fresh Zingib er officinale (ginger) rhizome juice, so it was not actually a two-herb formula. Unfortunately, clinical trials have not been conducted to confirm the traditional use of this formula for patients with UTI, but the formula does seem to be clinically useful.

Amur corktree contains many antimicrobial alkaloids, including berberine and jatrorrhizine; yet, surprisingly, in vitro, the herb was not active against Escherichia coli, the most common pathogen involved in UTIs. However, a crude ethanol extract of black atractylodes was found to be active against E. coli in vitro. The polycaltylene compound atractylozin was identified as a significant contributor to this antibacterial activity.

Various semisynthetic derivatives of this compound have now been created that produce even stronger anti–E. coli activity. Amur corktree has well-documented inflammation-modulating properties. It inhibits nuclear factor–kappaB, a major inflammatory pathway.

In a mouse model, extracts of Amur corktree and its close cousin, Phellodendron chinensis (corktree), suppressed inflammatory mediators such as cyclo-oxygenase-2, tumor necrosis factor-α (TNF-α, and interleukins [ILs]) 1β and 6.

Such effects are important, because there is evidence from a double-blinded, randomized trial that, in women with uncomplicated UTIs, the anti-inflammatory drug ibuprofen is just as effective as, if not more so, than the antibiotic ciprofloxacin.

The theory is that most UTIs are actually self-limiting but the symptoms are sufficiently uncomfortable that most women seek treatment before their bodies have time to eliminate the infection; giving more time by alleviating the symptoms may well allow these patient’s bodies to clear the infection naturally. This has the potentially huge benefit of avoiding the creation of antibiotic resistance by overprescription of antibiotics and of avoiding recurrent UTIs caused by antibiotic damage to the gut flora, which can result in the overgrowth of more uropathogens that can, in turn, reseed the bladder in the future.

Black atractylodes contains complex carbohydrates that have been shown repeatedly to modulate the immune system beneficially in preclinical studies. These studies have focused on effects on the intestinal immune system, which is relevant to UTI in two ways: (1) effects on immune cells in the gut will lead to systemic effects as those cells leave the gut and circulate through the body; and (2) responses to uropathogens in the gut may inform immune responses to these pathogens when they appear in the urinary tract.

Table 1. Ingredients of Eight Herb Powder for Rectification (Eight Corrections Powder)

<table>
<thead>
<tr>
<th>Latin name</th>
<th>Chinese name</th>
<th>English name</th>
<th>Part used</th>
<th>Amount in formulaa</th>
</tr>
</thead>
<tbody>
<tr>
<td>Akebia trifoliata</td>
<td>Mù tōng</td>
<td>Akebia</td>
<td>Stem</td>
<td>3–6 g</td>
</tr>
<tr>
<td>Plantago asiatica</td>
<td>Chê qián zí</td>
<td>Asian plantain</td>
<td>Seed</td>
<td>9–15 g</td>
</tr>
<tr>
<td>Dianthus chinensis</td>
<td>Qù mài</td>
<td>Dianthus, Chinese pink</td>
<td>Aerial parts</td>
<td>6–12 g</td>
</tr>
<tr>
<td>Talc</td>
<td>Huá shí</td>
<td>Talc</td>
<td>Mineral</td>
<td>12–30 g</td>
</tr>
<tr>
<td>Polygonum aviculare</td>
<td>Bǐn xù</td>
<td>Knotweed</td>
<td>Aerial parts</td>
<td>6–12 g</td>
</tr>
<tr>
<td>Gardenia jasminoides</td>
<td>Zhī zǐ</td>
<td>Gardenia, cape jasmine</td>
<td>Fruitb</td>
<td>3–9 g</td>
</tr>
<tr>
<td>Glycyrrhiza uralensis</td>
<td>Gàn cáo shào</td>
<td>Licorice</td>
<td>Unprepared rootlets or root tips</td>
<td>3–9 g</td>
</tr>
<tr>
<td>Rheum palmatum</td>
<td>Đào huáng</td>
<td>Rhubarb</td>
<td>Prepared root</td>
<td>3–6 g</td>
</tr>
</tbody>
</table>

aDoses listed are for the decoction version of the formula (the more common modern form in which it is used). For powder, equal parts are used.

bOlder sources indicate that the charred fruit (shǎn zhì zǐ) should be used to maximize its styptic effects, but more recent studies apparently show this is not as effective as the uncharred fruit (according to Bensky D, Clavey S, Stöger E, Gamble A. Chinese Herbal Medicine Materia Medica. 3rd ed. Seattle: Eastland Press, 2004).
A study in rats found that giving Two Marvel Powder led to higher levels of several berberine-type alkaloid metabolites in the animals’ urine than when Amur corktree was given by itself.\textsuperscript{13} This suggests that black atractylodes has some ability to increase absorption or inhibit excretion of Amur corktree’s constituents and/or their metabolites. This lends some credence to the utility of combining these two herbs rather than using either one in isolation. Human studies comparing the formula to the herbs given in isolate are needed to confirm this.

Eight Herb Powder for Rectification

Eight Herb Powder for Rectification (Bā Zhèng Sǎn, Hass- syosan in Japanese) originated in the Imperial Grace Formu- lary of the Táí Ping Era (Tài Ping Huì Mín Hé Jí Jù Fǎng), written by the Imperial Medical Bureau in 1107 AD (revised in 1151 AD). This source is one of the earliest known official formularies established by a national dispensary in the world.\textsuperscript{14}

The herbs usually found in the formula are listed in Table 1. The usual dose of the decoction is 1 cup t.i.d. of the total amount listed in the Table, divided in three equal parts. The usual dose of powder is 5 g t.i.d., often decocting each dose in water with 1 g of Juncus effusus (juncus, dēng xīn cǎo) pith. If the formula is not effective immediately, or if desired, the addition of more-intensely antimicrobial herbs—such as 9–12 g of phellodendron and 6 g of Coptis chinensis (coptis, goldthread, huáng lián) root—are recommended.\textsuperscript{15} These two herbs have also been shown, in rats, to be as potent for reducing inflammation as dexamethasone and celecoxib.\textsuperscript{16} It is critically important that the Akebia trifoliata used in this formula under the Chinese name mù tōng not be confused with the nephrotoxic herb Aristolochia spp., sometimes also called by this same common name.

Numerous case series have appeared in the Chinese medical literature (and thus some detail is lacking because of the current authors’ inability to access the full texts of these articles) about the efficacy of Eight Herb Powder for Rectification and slight variations of this formula for patients with UTIs. Clinical symptoms, including fever, were cleared effectively in one series of 72 patients with UTIs.\textsuperscript{17}

In another case series, 30 patients with UTIs were treated with a version of the formula that also included Astragalus membranaceus (astragalus, huáng qí) root, Dioscorea opposita (Chinese yam, shān yào) tuber, Eucommia ulmoides (eucommia, dù zhòng) bark, Benincasa hispida (wintermelon, dōng guā pí) rind, Glechoma longituba (longtube ground ivy, lián qián cǎo) leaf, and Lonicera japonica (honeysuckle, jīn yín huā) flower.\textsuperscript{18} One dose was given daily of the decocted formula. A control group of 28 patients were treated with intravenous ciprofloxacin daily. Both treatments were given for 5 days. There was no difference in efficacy between the two groups. More-rigorous controlled trials are warranted to confirm the efficacy of this promising, time-honored formula.

Ephedra, Aconite, and Asarum Formula

Ephedra, Aconite, and Asarum Formula (Má huáng fù zǐ xì xīn tāng, called mao-bushi-sasishin-tō in Japanese) was studied for concomitant antibiotic-resistant UTIs and respiratory infections in 7 elderly women.\textsuperscript{19} This formula contains Epherea sinica (Chinese ephedra) stem, Aconitum carmichaeli (Sichuan aconite) prepared lateral root, and Asarum spp. (Chinese wild ginger) root. All 7 subjects had been taking ofloxacin for 3 days with no abatement of fever. The antibiotics were stopped and 600 mg per day of the Ephedra, Aconite, and Asarum Formula were started for 7 days. The patients’ symptoms and fevers were reduced over the course of treatment, and serum C-reactive protein levels fell to normal in all but 1 patient. This formula could be a second-line treatment for patients with serious antibiotic-resistant UTIs. It must be used with caution because of the potential for Aconitum to cause cardiac arrhythmias; this explains the low dose used in the trial.

Benign Prostatic Hyperplasia

Benign prostatic hyperplasia (BPH) is not clearly described by any single syndrome in Chinese medicine. Kidney Yang Deficiency, Dampness in the Lower Jiao, and Blood Stasis are...
three of the most common descriptions applied to what would be recognized as BPH symptoms in Western medicine. Kidney Yang Deficiency is a syndrome of aging to some degree (mirroring the hormonal changes in aging also associated with BPH), with difficulty in urination, frequent urination, enuresis, and urinary incontinence as common symptoms.

In the Western view of BPH, there are two major problems: (1) overgrowth of smooth muscle–containing connective tissue in the prostate and (2) overgrowth of the extremely hormone-sensitive secretory tissue. Spasm of the excessive smooth-muscle cells is associated with the irritative symptoms of BPH (frequency, urgency, nocturia) while sufficiently large cell mass related to more secretory tissue—and possibly also connective tissue—results in obstructive symptoms (hesitancy, weak stream, urine retention).

Spasmolytics that can relax the smooth muscle can help relieve the first set of symptoms while hormone modulators can help relieve the second set of symptoms. Chinese herbal medicines exist that do both and thus are potentially of benefit in many ways.

**Enrich the Kidneys and Open the Gates Pill**

Enrich the Kidneys and Open the Gates Pill (Zī Shèn Tōng Guān Wán, often shortened to just Zī Shèn Wán) is a formula that originated in the Secrets from the Orchid Chamber (Lán Shī Mi Cāng) by Li Gāo (also known as Li Dōng-Yuán) in 1336 AD. The formula contains Anemarrhena asphodeloides (anemarrhena, zhī mǔ rhizome), Cinnamomum cassia (cassia, ròu guì bark, and phellodendron that is historically used for BPH. In rats with induced BPH, Zī Shèn Wán has been shown to reduce prostate weight (to a degree similar to finasteride). This formula has also been found to inhibit vascular endothelial and basic fibroblast growth-factor levels in the prostate, both known contributors to prostatic hyperplasia. Serum dihydrotestosterone levels fell, while serum testosterone levels stayed normal, in the rats. This confirms another study showing that anemarrhena has 5α-reductase-inhibiting properties. Phellodendron by itself inhibited prostate contractility in vitro. This formula and its components are worth studying further as treatments for patients with BPH. The formula has also been shown to be effective in a case study in elderly women with UTIs.

**Strawberry Saxifrage**

Strawberry saxifrage (Saxifraga stolonifera; strawberry saxifrage; part used not stated) is native to China but does not appear to be used extensively. One double-blinded trial compared this herb, at a claimed dose of 2 mg per day, to terazosin in 61 Chinese men with BPH. However, this dose is surely inaccurate as it is extremely low, even for an extract, and it is more likely that the researchers meant either 200 mg or 2 g. After 8 weeks, terazosin was significantly more effective than strawberry saxifrage for decreasing BPH symptoms. However, the two treatments had similar effects on a quality-of-life measurement and for improving urine flow rates. This intriguing result warrants further research, particularly given the herb’s good safety record.

The association of Blood Stasis with BPH is particularly intriguing, because modern research is starting to show scientific support for this link. Varicosities in the internal spermatic veins can create sufficient back-pressure in the pampiniform plexus to back blood up through connecting deferential veins into the prostatic venous plexus. This results in massive local overdosing of testosterone in the prostate, which may cause BPH and prostate cancer. This theory indicates that venous tonic herbs (and Blood Movers as they are called in Chinese medicine) may be helpful for preventing and treating BPH.

**Reishi Mushroom**

Ganoderma lucidum mushroom is known as lingzhi (“supernatural mushroom”) in Mandarin Chinese and reishi (or mannentake) in Japanese; reishi has become the English common name as well. This is a very common mushroom of the northern forests around the globe. The very hard, woody, red–black, shiny fruiting body is traditionally used (ground into powder), although research continues to suggest the mycelium and spores are equally effective. There is actually no evidence of ancient use of this mushroom as a medicine, but in modern Chinese medicine, this use is fairly common.

Two double-blinded, randomized clinical trials have been conducted on reishi for men with BPH. In one trial, 50 men were given either ganoderma or placebo for 8 weeks. The ganoderma was a 30% ethanol extract dosed at just 6 mg per day, which seems to be an extremely low dose. Nevertheless, reishi was more effective than placebo for reducing urinary symptoms without affecting prostate size, peak flow, or serum prostate-specific antigen. There were no differences in adverse effects between the groups, and all of these effects were mild. A similar trial ran for 12 weeks with 88 men, producing the same results. The mechanism of action is unclear; some rodent studies suggest that this mushroom produces antiandrogen activity. More-typical doses are 500–1000 mg b.i.d.–t.i.d. of encapsulated powder. It can aggravate an already inflamed digestive tract, but otherwise is very safe.

**Chronic Prostatitis**

Chronic prostatitis is most similar to syndromes of Blood Stagnation in the pelvic region, Stagnant Liver Qi, or Damp-Heat in the Lower Jiao. Chinese medicine posits that, depending on the constitution of the patient and the patient’s presenting symptoms, different medicines should be used. While superficially, this appears to be very different from the Western medical approach of diagnosing a disease and treating everyone with that disease more-or-less the same way, it is actually not that distinct. The truth is that the term chronic prostatitis is now understood to refer to many conditions, and that patients presenting with the same symptoms (pelvic pain predominant-ly) can have chronic prostatitis as a result of interstitial cystitis, pelvic-floor dysfunction/trigger point problems, irritable bowel syndrome/dyspepsia functional motility syndrome, true infection, or idiopathic inflammation in the prostate.
Alternative and complementary therapies are needed to help patients recover from each of these distinct syndromes. Many studies have researched the effects of different herbal formulas adapted to the specific Chinese syndromes with which patients present. Going into detail about most of these studies is beyond the scope of this article, but an attempt to summarize them and give some sense of an Eastern translation of the ideas included is provided in Table 2.

Unfortunately, two meta-analyses of studies of Chinese herbal formulas for patients with chronic prostatitis have found that the low quality of the trials conducted to date and publication bias made it impossible to know if individualized Chinese herbal prescriptions are effective.\(^3^3,3^4\) Note that there are competing views of how to differentiate and treat chronic prostatitis in Chinese medicine; the items presented here are an attempt to harmonize multiple differing points of view.

### Eight Treasure Powder or Decoction

Eight Treasure Powder or Decoction (Bā Zhēn Sān or Bā Zhēn Tāng) originated in the Experiential Formulas from the Auspicious Bamboo Hall (Ruì Zhú Táng Jīng Yàn Fāng) by Shā-Tú Mù-Sū, written in 1326 AD. This decoction’s ingredients are listed in Table 3. Often, Codonopsis pilosula (dāng shēn) is substituted for Asian ginseng in this formula at twice the dose because of the high cost of Asian ginseng.

### Table 2. Differentiation of Chronic Prostatitis Types with Associated Chinese Herbal Treatment

<table>
<thead>
<tr>
<th>Chinese syndrome name</th>
<th>Key features of syndrome</th>
<th>Recommended treatments</th>
</tr>
</thead>
<tbody>
<tr>
<td>Damp-Heat in Lower Jiao(^a^)</td>
<td>Frequency, urgency, burning on urination; turbid or foul urine; perineal, scrotal, or lumbar pain; bacteriuria; and/or pyuria</td>
<td>Eight Treasure Powder (Bā Zhēn Sān)(^b^) Reaping Mixture (Ài Hè Ji)(^b^)</td>
</tr>
<tr>
<td>Liver Qi Stagnation</td>
<td>Pelvic-floor hypertonicity, pelvic-floor muscle spasms, &amp; pelvic-floor and/or perineal trigger points (may also be anxious)</td>
<td>Reaping Mixture (Ài Hè Ji)(^b^) Bupleurum Powder to Dredge the Liver (Chái Hú Shū Gān Sān)(^b^)</td>
</tr>
<tr>
<td>Blood Stagnation in pelvis (caused by Qi Deficiency not driving the Blood)</td>
<td>Qi Deficiency: Fatigue; brain fog; cold/can’t get warm; poor appetite; depression; or anxiety Blood Stagnation: vague dull pain; varicose veins; &amp; indigestion</td>
<td>Qi tonics, such as Panax ginseng (rén shēn), Codonopsis pilosula (dāng shēn), or Astragalus membranaceus. Black Colt Capsule (Xuán Jū Jiāo Náng)(^b^) Tokoro Drink to Separate the Clear from Medical Revelations (Bì Xiè Fēn Qīng Yī Xué Xīn Wù)</td>
</tr>
<tr>
<td>Kidney Yang Deficiency</td>
<td>Erectile dysfunction, cold, low energy, depression &amp; pale, turbid urine</td>
<td>Cinnamon, Aconite, &amp; Rehmanna Powder (Guì Fū Di Huáng Wán)</td>
</tr>
</tbody>
</table>

\(^a^\)If this has a sudden onset with fever, it represents acute prostatitis which is more commonly treated with Long Dan Xie Gan Tang with Bei Xie and Bai Jiang Cao, in combination with antibiotics if symptoms are not reduced within 24 hours of initiating treatment.

\(^b^\)This is discussed in more depth in the text.


### Table 3. Ingredients of Eight Treasure Powder/Decoction

<table>
<thead>
<tr>
<th>Latin name</th>
<th>Chinese name</th>
<th>English name</th>
<th>Part used</th>
<th>Amount in formula (powder/decocction)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Panax ginseng</td>
<td>Rén shēn</td>
<td>Asian ginseng</td>
<td>Root</td>
<td>30 g (6-9 g)</td>
</tr>
<tr>
<td>Atractylodes macrocephala</td>
<td>Bái zhù</td>
<td>White atracylodes</td>
<td>Prepared root</td>
<td>30 g (9-12 g)</td>
</tr>
<tr>
<td>Wolfiporia extensa</td>
<td>Fú líng</td>
<td>Hoelen</td>
<td>Sclerotium</td>
<td>30 g (12-15 g)</td>
</tr>
<tr>
<td>Glycyrrhiza uralensis</td>
<td>Zhì gán cāo</td>
<td>Chinese licorice</td>
<td>Prepared root</td>
<td>30 g (3-6 g)</td>
</tr>
<tr>
<td>Rehmanna glutinosa</td>
<td>Shū dì huáng</td>
<td>Chinese foxglove</td>
<td>Prepared root</td>
<td>30 g (15-18 g)</td>
</tr>
<tr>
<td>Paeonia lactiflora</td>
<td>Bái sháo</td>
<td>White peony</td>
<td>Root without bark</td>
<td>30 g (12-15 g)</td>
</tr>
<tr>
<td>Angelica sinensis</td>
<td>Dāng gui</td>
<td>Dong quai</td>
<td>Prepared root</td>
<td>30 g (12-15 g)</td>
</tr>
<tr>
<td>Ligusticum chuanxiong</td>
<td>Chuān xiōng</td>
<td>Szechuan lovage</td>
<td>Root</td>
<td>30 g (6-9 g)</td>
</tr>
</tbody>
</table>

Source: Ref. 44.
Liver to finasteride alone in 60 men with chronic prostatitis with outcome of the study. to based on their Chinese syndrome may have influenced the also that assigning patients randomly to treatment as opposed is mainly for that problem, this formula was quite helpful), and very common in men with chronic prostatitis (as a formula that interesting in that it suggests that pelvic-floor dysfunction was be significantly superior to any of the other formulas or pla-

Another study showed that this formula could reduce inflammatory markers (IL-1 and TNF-\(\alpha\)) in expressed prostatic secretions of men with chronic bacterial prostatitis.43

**Reaping Mixture**

Another double-blinded trial randomized 218 men with chronic nonbacterial prostatitis to one of three formulas or placebo without regard to their traditional Chinese syndromes.38 One group received Eight Treasure Powder, another received Reaping Mixture (Ai Kè Hé Jì, for smoothing Liver Qi), and a third received Qian Lie Xian Yan (no details could be obtained on this formula, except that it was stated to be a formula for promoting blood circulation). Reaping Mixture was found to be significantly better as a treatment for chronic gastritis.42 This formula has also been investigated for its effect on chronic prostatitis. In one case series, the formula proved to be effective for relieving symptoms in men with chronic nonbacterial prostatitis.43 The formula is considered to be a classic choice for pain that relapses and remits, which is very typical of the waxing–waning nature of chronic prostatitis.44 The usual dose is 9 g, three times per day, usually mixed with hot water.

**Black Colt Capsule**

Another formula that has been fairly extensively studied in modern times for chronic prostatitis and other men’s health concerns—but not discussed in many traditional texts—is Black Colt Capsule (Xuán Jū Jiāo Náng). The origin of this formula is unknown. This formula contains as a main ingredient a species of black ants (*Polyrhachis vicina*)—the “black colts” of the formula’s name. A close relative of this ant, *Polyrhachis lamellidens*, has been shown to be inflammation-modulating and analgesic in rats.45 The other ingredients of the formula are *Epimedium brevicornum*.

<table>
<thead>
<tr>
<th>Latin name</th>
<th>Chinese name</th>
<th>English name</th>
<th>Part used</th>
<th>Amount in formula</th>
</tr>
</thead>
<tbody>
<tr>
<td><em>Citrus reticulata</em></td>
<td>Cú chíchérén pi</td>
<td>Tangerine</td>
<td>Vinegar-fried peel</td>
<td>6 g</td>
</tr>
<tr>
<td><em>Bupleurum falcatum</em></td>
<td>Chái hú</td>
<td>Thorowax</td>
<td>Root</td>
<td>6 g</td>
</tr>
<tr>
<td><em>Ligusticum chuanxiong</em></td>
<td>Chuán xióng</td>
<td>Szechuan lovage</td>
<td>Root</td>
<td>4.5 g</td>
</tr>
<tr>
<td><em>Citrus aurantium</em></td>
<td>Zhǐ ké</td>
<td>Bitter orange</td>
<td>Dry-fried fruit</td>
<td>4.5 g</td>
</tr>
<tr>
<td><em>Paeonia lactiflora</em></td>
<td>Shòo yào</td>
<td>Red or white peony</td>
<td>Root with or without bark</td>
<td>4.5 g</td>
</tr>
<tr>
<td><em>Cyperus rotundus</em></td>
<td>Xiāng fù</td>
<td>Cyperus, nutgrass</td>
<td>Rhizome</td>
<td>4.5 g</td>
</tr>
<tr>
<td><em>Glycyrrhiza uralensis</em></td>
<td>Zhì gàn cáo</td>
<td>Chinese licorice</td>
<td>Prepared root</td>
<td>1.5 g</td>
</tr>
</tbody>
</table>

Source: Ref. 44.
(horny goat weed, yin yang huo), Lycium chinense (goji, gou qi zhi) fruit, and Cnidium monnieri (cnidium, she chang zhi) seed. The usual dose of Black Colt Capsules is 500–1000 mg b.i.d.–t.i.d.

In a clinical trial of chronic prostatitis associated with Kidney Yang Deficiency, 120 men were randomized to receive either Black Colt Capsule or the α-blocker drug doxazosin.46 Black Colt Capsule was significantly more effective than doxazosin for relieving prostatitis symptoms as well as improving erectile function. A similar trial randomized 242 men with chronic nonbacterial prostatitis to receive either Black Colt Capsule and tamsulosin or quinolone antibiotics with tamsulosin for 6 months.47 The herbal formula with tamsulosin was significantly more effective for relieving symptoms as assessed by the NIH-CPSI and at reducing complications, compared to the antibiotics/tamsulosin group.

Another trial randomized 132 patients with chronic prostatitis to take either levofloxacin for 4–6 weeks and tamsulosin or antibiotics/tamsulosin for 2 months.48 Both groups had significantly reduced symptoms based on the NIH-CPSI, compared to baseline. Improvement in erectile function was significantly better (nearly 3 times better in fact) in the group including Black Colt Capsule versus drugs only. There were no serious treatment-related adverse effects. A similar trial comparing Black Colt Capsules to antibiotics in 90 patients with chronic nonbacterial prostatitis found similar results: The herbs reduced symptoms and improved erectile function significantly better than antibiotics did.49

Rehmannia Eight

Finally, the formula Rehmannia Eight (Bà Wèi Di Huang Wàn), known as Hachimi-jio-gan in Japanese, has been studied as an adjunct to antibiotics in patients with chronic prostatitis. It contains Chinese foxglove, Cornus officinalis ( Asiatic cornelian cherry, shān zhī yù) fruit, Dioscorea opposita ( Chinese yam, shān yào) root, Paeonia suffruticos (tree peony, mǔ dān pí) root bark, hoelen, Alismatis orientalis ( water plantain, zé xiè) rhizome, Schisandra chinensis (schisandra, wū wèi zǐ) fruit, and astragalus honey-fried root. The usual dose is 6 g b.i.d. Combining Rehmannia Eight with trimethoprim– sulfamethoxazole (TMP-SX) was significantly more effective than TMP-SX alone for relieving symptoms in men with chronic prostatitis.50 It was unclear if the study was randomized or blinded.

Conclusion

Chinese medicine offers some interesting therapeutic alternatives for patients with UTIs, BPH or chronic prostatitis. Much of the clinical research that has been conducted, unfortunately, is of low quality, and the full details are only available in Chinese, and, even then, the Chinese full text is rarely readily available. Nevertheless, these trials do offer preliminary support for a range of herbs and herbal formulas for these three common urologic problems; these herbs are worthwhile studying further.

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