

**THE TREATMENT OF DEPRESSION
WITH CHINESE HERBAL MEDICINE**

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I. INTRODUCTION

Depression is a very common condition with estimates that range up to 17% of the United States population experiencing major depression at some point in their lives. Psychotherapy and pharmaceutical drugs are the current standard of care for depression in the United States, and antidepressant drugs are currently among the most commonly prescribed of all Western pharmaceutical drugs. However, these antidepressant drugs have significant side effects for a great many of the users and are ineffective for many other users.

In China, herbal medicine has traditionally been employed to treat all illnesses, including what we would today call major depression. Chinese herbal medicine identifies patterns of imbalance in the body/mind, uses herbal formulas to address these imbalances, and thereby resolves depression by bringing the body/mind back into health and balance without creating unwanted side effects.

Chinese herbal medicine may be used either as the primary care modality for depression or as an adjunct therapy. As an adjunct therapy Chinese Herbal Medicine can hasten the healing process, treat the side effects of pharmaceutical drugs, or treat somatic conditions that are often associated with mental depression.

This paper summarizes both Western medical treatments for depression and Chinese herbal medicine treatments for depression.:

- Sections II and III of this paper summarize the symptoms generally associated with a Western medical diagnosis of major depression and the Western medical treatments for this condition.
- Section IV of this paper draws correspondences between western medical symptoms of depression and TCM (Traditional Chinese Medicine) differentiations of depression.
- Section V discusses treatment principles for various TCM differentiations associated with depression.
- Finally, Section VI lists herbal formulas that are commonly used in the treatment of depression along with the formula actions.

II. WESTERN MEDICAL DEFINITION OF DEPRESSION

Depression is a term that has been commonly used to describe a variety of ailments ranging from minor to incapacitating. However, from a western medical clinical standpoint, the current definitions are found in the Diagnostic and Statistical Manual of Mental Disorder, fourth edition (DSM-IV), published by the American Psychiatric Association (APA), 1994. The DSM-IV details the diagnostic criteria for over 300 mental disorders that might be the focus of western medical professional attention.

Clinically significant depression, termed major depression is a serious condition characterized not only by a depressed mood but also a cluster of other somatic, cognitive and motivational symptoms. Major depression can be differentiated from a normal and transient sad mood by several factors, primarily the following:

- Intensity: major depression causes impairment in social or occupational functioning and persists across time and situations
- Relationship to antecedent events: major depression either occurs without any identifiable antecedent event or is in excess of what would be considered an expected reaction.
- History: major depression typically occurs after a history of other such episodes.

These requirements would exclude many normal reactions to life situations, such as moderately prolonged grief after the death of a closely related person.

In order to be diagnosed with a major depressive episode according the DSM-IV, an individual must have one of the two following symptoms:

- Depressed mood for most of the day on nearly every day
- Loss of interest or pleasure (anhedonia) in all or almost all activities for most of the day on nearly every day.

Additional symptoms that may accompany the above are the following:

- Significant prolonged weight loss or weight gain or decreased/increased appetite
- Insomnia or hypersomnia
- Observable psychomotor agitation
- Fatigue or loss of energy

- Feelings of worthlessness or excessive or inappropriate guilt
- Diminished ability to think or concentrate
- Indecisiveness
- Recurrent thoughts of death or suicide

The DSM-IV distinguishes two broad classes of mood disorder: unipolar and bipolar disorder. Unipolar disorders involve only the depressed dimensions of mood and do not include periods of above average mood such as manic or hypomanic episodes. There are two unipolar mood disorders: the major depressive disorder discussed above and dysthymia. Dysthymia is similar to major depressive disorder but is less intense and more chronic. There are also numerous combinations of mania and depression. The three primary types described in DSM-IV are bipolar I disorder, bipolar II disorder, and cyclothymic disorder. However, these last three are beyond the scope of this paper, as is depression that occurs after a prolonged physical illness such as stroke.

III. EPIDEMIOLOGY AND WESTERN MEDICAL TREATMENT OF MAJOR DEPRESSION

Major depression is a relatively common condition. Lifetime prevalence estimates vary from 5% to 17%. Unipolar depression is approximately twice as common in women as for men. The costs of major depression are substantial, exceeding other chronic diseases such as diabetes or hypertension in terms of personal distress, lost productivity, interpersonal problems and suicide. A recent study estimated that the annual costs of depression in the United States exceeded \$40 billion. Western medical treatments for depression include both psychotherapies and drug therapies, and numerous studies have delineated the clinical effectiveness of these therapies. However, a great many patients are not significantly helped by these therapies and there are numerous side effects from the drug therapies. Advocates of standard antidepressant medications (e.g. tricyclics) generally acknowledge that about one-third of patients do not improve with medication, one-third display improvements with placebos, and the remaining third demonstrate improvement that would not occur with placebo. (figures abstracted from Schnyer and Allen, 2001)

Commonly prescribed antidepressants are monoamine oxidase inhibitors (MAOIs), Tricyclics(TCAs), and Selective Serotonin Reuptake Inhibitors (SSRIs). Of these the SSRIs are the most popular today with well-known brand names such as Prozac, Paxil and Zoloft. Common side effects of the SSRIs include increased anxiety, nausea, weight loss, headaches and sexual dysfunction. Furthermore, while these antidepressant medications are often effective in the short term, little is known about their long term efficacy and a substantial number of patients have reported the return of depressive symptoms despite continued treatment.

IV. DIFFERENTIATION OF DEPRESSION ACCORDING TO TRADITIONAL CHINESE MEDICINE

Major depression as described above is a complex interplay of disease mechanisms that develop from three main factors: (1) excess or deficiency of either yin or yang, (2) the liver's inability to maintain the free flow of qi (liver depression qi stagnation), and (3) a disturbance in the heart's function of housing the spirit (shen). Of these, liver depression qi stagnation is the most important and this syndrome is found in almost all cases of major depression. The actual etiology, interactions, and progression of the chief symptoms can be highly complex.

The following table illustrates some of the correspondences between the DSM-IV symptoms of major depression and the likely TCM pattern:

TABLE 1

DSM-IV SYMPTOM	YIN EXCESS/ YANG OR QI DEFICIENCY	YANG EXCESS OR YIN DEFICIENCY	QI STAGNATION	SHEN DISTURBANCE
Depressed mood	Depressed mood with lethargy and weakness, lower libido, decreased motivation	Depressed mood with irritability, uneasiness, anxiety, violent outbursts of anger, aggression	Depressed mood with emotional lability, periodic outbursts of anger, frustration, erratic physical complaints. Migratory pains, sighing, distension of breast and abdomen	Depressed mood characterized by flat affect
Diminished interest or pleasure	Same as DSM-IV			Same as DSM-IV
Fatigue or lack of energy	Same as DSM-IV			
Appetite Disturbance	Loss of appetite with weak digestion, tendency towards loose stools or diarrhea	Excessive appetite, bitter taste in mouth, thirst	Indigestion with belching, nausea, bloating, flatulence; erratic elimination	
Sleep Disturbance	hypersomnia	Dream disturbed sleep; nightmares		Insomnia with difficulty falling asleep or waking up early

DSM-IV SYMPTOM	YIN EXCESS/ YANG OR QI DEFICIENCY	YANG EXCESS OR YIN DEFICIENCY	QI STAGNATION	SHEN DISTURBANCE
Psychomotor agitation or retardation	Decreased energy level, slow body movements, no desire to move or talk	Inability to sit still, pacing, agitation, nervousness		Incessant, nervous talking. Slow soft monotonous speech; muteness or decreased speech., increased pauses
Worthlessness: excessive or inappropriate guilt	Excessive or inappropriate guilt		Excessive or inappropriate guilt accompanied by frustration and periodic outbursts of anger	Feeling of worthlessness
Diminished ability to think or concentrate	Both features with accompanied by apathy and lethargy	Both features when accompanied by agitation and restlessness	Indecisiveness when accompanied by frustration	Diminished ability to think or concentrate
Recurrent thoughts of death, suicidal ideation or attempt	Recurrent suicidal ideation, no plans and no attempts	Recurrent suicidal ideation, possibly more attempts	Recurrent suicidal ideation with a specific plan	Recurrent suicidal ideation with or without a plan
Other symptoms or associated features	Brooding or rumination, phobias, excessive concern with physical symptoms	Anxiety, panic attacks, phobias	Tearfulness, irritability, excessive concern with physical health, panic attacks with agoraphobia	Tearfulness, anxiety, panic attacks

Source: Schnyer and Allen, 2001

Of course, the above TCM differentiations would be supplemented with tongue and pulse diagnosis. There are almost always associated somatic symptoms as well. Note that in the case of suicidal ideation, a practitioner should immediately refer the patient to a Western trained professional psychologist or psychiatrist.

Another way to look at depression in terms of TCM differentiation is with the five elements correspondences. The following table summarizes these correspondences as they relate to the DSM-IV symptoms:

TABLE 2

	WOOD	FIRE	EARTH	METAL	WATER
Organ Network	Liver, gall bladder	Heart, small intestine	Spleen, stomach	Lung, large intestine	Kidney, urinary bladder
Emotions and their imbalances	<i>Anger</i> Qi tends to rise, lash out or if unexpressed become stagnant	<i>Joy or fright</i> Qi tends to get dissipated or scattered	<i>Worry or pensiveness</i> Excessive thinking and rumination cause the qi to bind	<i>Sorrow</i> Inability to overcome grief weakens the qi	<i>Fear</i> Qi tends to descend or becomes petrified and frozen
Mental aspect	<i>Hun:</i> provides us with proper judgment, vision, insight, intuition: gives us sense of direction, allows us to plan, influences sleep or dreaming	<i>Shen:</i> Maintains our awareness and expresses the integration of our being	<i>Yi:</i> Provides concentration and memorization. When imbalanced we tend to think constantly, to brood and ruminate	<i>Po:</i> Serves as the organizational principle of the body, gives us the capacity of movement, agility and coordination	<i>Zhi:</i> Responsible for drive, determination and long-term memory

	WOOD	FIRE	EARTH	METAL	WATER
DSM-IV associated features	Depression with irritability, periodic outbursts of anger, frustration, erratic physical complaints, digestive disturbance	Depression with diminished interest and pleasure, insomnia, anxiety, speech disturbances, diminished ability to think or concentrate, feelings of worthlessness	Depression with lethargy, excessive or inappropriate guilt, rumination, apathy phobias	Depression with lethargy and weakness, psychomotor retardation, fatigue	Depression with lethargy, apathy, decreased libido, isolation

Source: Beinfield & Korngold (1991)

However, for the most part the five element patterns can be treated with the eight principle and zang-fu syndromes as outlined elsewhere in the paper.

V. TREATMENT OF DEPRESSION WITH CHINESE HERBAL MEDICINE

As with all TCM treatments, the pattern is first determined, then the treatment principles are enunciated and the treatment adjusted to fit the complexity of the individual patient. Major depression is generally characterized by the combination of various mental patterns as outlined above, and it is possible that all of the above patterns may be present in some degree. Pulse, tongue and other somatic syndromes will help the practitioner determine which is the main syndrome to be treated at a particular time. As with all herbal treatments the primary goal is to help bring the patient's body, mind and spirit back into balance and allow the patient's self-healing to occur. The following table represents some treatment principles and formulas based on the main TCM syndromes associated with depression:

TABLE 3

MAIN TCM SYNDROME	MAIN MENTAL SYMPTOMS ASSOCIATED WITH DEPRESSION	MAIN TREATMENT PRINCIPLES
Liver depression qi stagnation	Irritability, mental depression, moodiness, alternation of moods, snapping easily, feelings of frustration	Course the liver, rectify the qi, resolve depression
Liver depression qi stagnation transforming to heat	Easy anger, impetuosity, mental restlessness, aggression, violent outburst of anger	Course the liver, clear heat, rectify the qi, resolve depression
Qi stagnation affecting heart and lung	Sadness, a tendency to weep, anxiety, easily affected negatively by the problems of other people	Course the liver, tonify heart and lung
Blood Stasis and stagnation	Agitation, thoughts of suicide, severe insomnia, chronic, sustained or severe depression	Course the liver, quicken the blood, transform stasis
Heart blood or heart qi deficiency	Depression with fatigue, confusion, lack of concentration	Nourish blood, tonify heart qi
Heart yin deficiency	Dispirited, depressed and tired yet restless and anxious at the same time; lack of willpower and drive	Tonify heart yin
Heart yin deficiency with deficiency heat	Same as above but also aggressive and impatient	Clear heat, tonify heart yin
Excessive heart fire	Recurrent suicidal ideation, possibly with suicide attempts, aggression, violent outbursts; if severe, manic agitation and delirious speech	Clear fire and heat (However, a case like this would need to be referred out prior to treatment)
Spleen and lung qi deficiency	Depression with fatigue, slow thinking and speaking, slow movements, poor memory and concentration, decreased motivation, diminished interest or pleasure, excessive desire to sleep	Tonify spleen qi, tonify lung qi
Kidney qi or yang deficiency	Mental and physical exhaustion, no willpower or initiative, hopelessness about getting better or starting or changing anything. Everything is too much effort	Tonify kidney qi and kidney yang
Phlegm misting the heart	Mental confusion, poor memory, withdrawal. If severe, loss of insight and total mental confusion, obsessive thinking and rumination	Clear phlegm, nourish heart, calm spirit

MAIN TCM SYNDROME	MAIN MENTAL SYMPTOMS ASSOCIATED WITH DEPRESSION	MAIN TREATMENT PRINCIPLES
Kidney yin deficiency	Depression with exhaustion, lack of willpower, feeling aimless, rigid mental attitude, restlessness, despair	Tonify kidney yin
Hyperactivity of liver yang	Pronounced irritability, palpitations, insomnia, anxiety	Soothe the liver, tonify liver and kidney yin, calm spirit
Spleen deficiency giving rise to yin fire	Sorrow, inexplicable weeping and crying, agitation, anxiety, and insomnia	Tonify yin, clear heat

Virtually all patients with depression symptoms will have some element of liver stagnation qi depression. Of course, most of the patients that appear in actual clinical practice will have some combination of the TCM syndromes, so the actual patterns treated will be combined and modified to suit the individual patient. The following individual patterns are the most common seen in clinical practice (Schneyer and Flaws, 1998), (Flaws and Lake, 2001):

1. Liver depression qi stagnation
2. Liver depression transforming into heat or fire
3. Liver blood stasis and stagnation
4. Phlegm dampness obstruction and stagnation
5. Phlegm fire harassing the spirit
6. Anxiety and worry harassing the heart spirit
7. Heart-spleen dual vacuity
8. Yin vacuity with fire effulgence

VI. MAIN HERBAL FORMULAS USED IN THE TREATMENT OF DEPRESSION

The following formulas are commonly used to treat patients with symptoms of depression. They will be individually modified or combined to suit the presenting physical and mental individual patterns of the patient. Some of the following formulas would rarely be used by themselves for a patient being treated for depression, but they or herbs within them could be added to other formulas that treat the main patterns.

Basic formula proportions have been taken from Ehling and Swart, 2002, for consistency in quantities between formulas wherever possible. Formulas represent an approximate 60 gram dosage.

Formula name: **Xiao Yao San**

Formula Actions: Courses liver, strengthens spleen, and nourishes the blood

Formula Ingredients:

Chai Hu	6-9 g
Dang Gui	6-9 g
Bai Shao	6-9 g
Bai Zhu	3-9 g
Fu Ling	6-9 g
Zhi Gan Cao	3-6 g
Bo He	3-6 g
Sheng Jiang	3-6 g

Ehling and Swart, p. 225

Formula name: **Jia Wei Xiao Yao San, Dan Zhi Xiao Yao San**

Formula Actions: Courses liver, strengthens spleen, clears heat, and nourishes the blood

Formula Ingredients:

Chai Hu	6-9 g
Dang Gui	6-9 g
Bai Shao	6-9 g
Bai Zhu	3-9 g
Fu Ling	6-9 g
Zhi Gan Cao	3-6 g
Mu Dan Pi	6-9 g
Zhi Zi	3-6 g
Bo He	3-6 g
Sheng Jiang	3-6 g

Ehling and Swart, p. 199

Formula name: **Chai Hu Jia Long Gu Mu Li Tang**

Formula Actions: Courses liver, clears heat, tonifies spleen, calms spirit

Formula Ingredients:

Chai Hu	9-12 g
Huang Qin	6 g
Ren Shen	6 g
Gui Zhi	3-6 g
Ban Xia	6 g
Fu Ling	6 g
Da Huang	6 g
Long Gu	3-6 g
Mu Li	3-6 g
Sheng Jiang	3-6 g
Da Zao	3-6 pc
Qian Dan	deleted

Ehling and Swart, p. 20

Formula name: **Jin Ling Zi San Jia Wei**

Formula Actions: course the liver, move the qi, quicken the blood, transform stasis

Formula Ingredients:

Chuan Lian Zi	30 g
Yan Hu Suo	30 g
Tao Ren	6 g
Dang Gui	6 g
Yu Jin	6 g
Jiang Xiang	6 g

(Cara Frank lecture notes, 2005)

Formula name: **Chai Hu Su Gan San**

Formula Actions: Spreads the liver qi, harmonizes the blood, alleviates pain

Formula Ingredients:

Chai Hu	6-9 g
Chuan Xiong	3-6 g
Xiang Fu	3-6 g
Bai Shao Yao	6-9 g
Zhi Ke	3-6 g
Gan Cao	3-6 g
Chen Pi	6-9 g

Ehling and Swart, p. 198

Formula name: **Xue Fu Zhu Yu Tang**

Formula Actions: invigorates the blood, dispels blood stasis, spreads liver qi, unblocks the channels

Formula Ingredients:

Dang Gui	6-9 g
Chuan Xiong	3-9 g
Sheng Di Huang	6-9 g
Chi Shao Yao	6-9 g
Tao Ren	6-12 g
Hong Hua	6-9 g
Chuan Niu Xi	9-12 g
Jie Geng	3-6 g
Zhi Ke	3-6 g
Chai Hu	3-9 g
Gan Cao	3-6 g

Ehling and Swart, p. 87

Formula name: **Xiao Chai Hu Tang**

Formula Actions: harmonizes and release less yang stage disorders, harmonizes inside and outside of the body, harmonizes liver and spleen

Formula Ingredients:

Chai Hu	9-15 g
Huang Qin	6-9 g
Ban Xia	6-12 g
Ren Shen	9-12 g
Sheng Jiang	3-6 g
Da Zao	3-4 pc
Zhi Gan Cao	3-6 g

Ehling and Swart, p. 392

Formula name: **Gan Mai Da Zao Tang**

Formula Actions: Nourishes heart, calms spirit, harmonizes the middle burner

Formula Ingredients:

Gan Cao	9-12 g
Fu Xiao Mai	9-15 g
Da Zao	10 pc

Ehling and Swart, p. 199

Formula name: **Gui Pi Tang**

Formula Actions: Augments the qi, tonifies the blood, strengthens spleen, nourishes the heart

Formula Ingredients

Ren Shen	6-9 g
Huang Qi	9-12 g
Fu shen	6-9 g
Bai Zhu	9-12 g
Long Yan Rou	9-12 g
Mu Xiang	3-6 g
Suan Zao Ren	9-12 g
Dang Gui	6-9 g
Yuan Zhi	3-6 g
Gan Cao	3-6 g

Ehling and Swart, p. 83

Formula name: **Er Chen Tang**

Formula Actions: Dries damp, transforms phlegm, regulates the qi, harmonizes the middle burner

Formula Ingredients:

Ban Xia	6-9 g
Chen Pi	3-6 g
Fu Ling	6-9 g
Gan Cao	3-6 g
Sheng Jiang	3-6 g
Da Zao	3 pc

Ehling and Swart, p. 159

Formula name: **Tian Wang Bu Xin Dan**

Formula Actions: Enriches the yin, nourishes the blood, tonifies the heart, calms the spirit

Formula Ingredients:

Ren Shen	9-12 g
Mai Men Dong	6-12 g
Tian Men Dong	6-9 g
Xuan Shen	6-9 g
Dan Shen	6-12 g
Sheng Di Huang	15-30 g
Fu Ling	6-9 g
Wu Wei Zi	6-9 g
Jie Geng	3-6 g
Yuan Zhi	6-9 g
Bai Zi Ren	6-9 g
Dang Gui	6-9 g
Suan Zao Ten	6-12 g
Zhu Sha	deleted

Ehling and Swart, p. 77

Formula name: **Liu Wei Di Huang Wan**

Formula Actions: Tonifies kidney and liver yin, drains heat, dries damp

Formula Ingredients:

Shan Zhu Yu	6-9 g
Shan Yao	6-9 g
Sheng Di Huang	6-12 g
Fu Ling	6-9 g
Ze Xie	6-9 g
Mu Dan Pi	6-9 g

Ehling and Swart, p. 230

Formula name: **Zhi Bai Di Huang Wan**

Formula Actions: Clears heat and fire, tonifies kidney and liver yin

Formula Ingredients:

Huang Bai	3-9 g
Zhi Mu	6-9 g
Sheng Di Huang	15-25 g
Shan Yao	9-12 g
Shan Zhu Yu	9-12 g
Mu Dan Pi	6-9 g
Ze Xie	6-9 g
Fu Ling	6-9 g

Ehling and Swart, p. 327

Formula name: **Jin Gui Shen Qi Wan**

Formula Actions: Warms and tonifies kidney yang

Formula Ingredients:

Shu Di Huang	24 g
Shan Zhu Yu	12 g
Shan Yao	12 g
Mu Dan Pi	9 g
Ze Xie	9 g
Fu Ling	9 g
Rou Gui	3 g
Fu Zi	3 g

Ehling and Swart, p. 289

Formula name: **Ding Xin Wan**

Formula Actions: Tonifies the heart qi and calms the spirit

Formula Ingredients:

Ren Shen	12-15 g
Fu Ling	6-9 g
Shi Chang Pu	6-9 g
Yuan Zhi	9-12 g
Fu Shen	9-12 g
Zhu Sha	deleted

Ehling and Swart, p. 68

Formula name: **Bu Zhong Yi Qi Tang**

Formula Actions: Tonifies middle burner qi, raises sunken yang

Formula Ingredients:

Ren Shen	6-12 g
Huang Qi	9-15 g
Dang Gui	6-9 g
Chen Pi	3-6 g
Sheng Ma	3-9 g
Chai Hu	3-9 g
Bai Zhu	3-9 g
Zhi Gan Cao	3-6 g

Ehling and Swart, p. 97

Formula name: **Si Qi Tang**

Formula Actions: Moves qi, directs rebellious qi downwards, transforms phlegm, calms the heart

Formula Ingredients:

Ban Xia	9-12 g
Hou Po	9 g
Fu Ling	12 g
Sheng Jiang	15 g
Zi Su Ye	6 g
Da Zao	6 pc

Flaws and Lake, p. 331

Formula name: **Ren Shen Gan Mai Fang Jia Wei**

Formula Actions: Nourishes the heart, calms the spirit, tonifies the qi

Formula Ingredients:

Ren Shen	15 g
Fu Xiao Mai	30 g
Gan Cao	10-12 g
Fu Ling	12 g
Yi Zhi Ren	10 g
Shi Chang Pu	6-10 g
He Huan Hua	15 g
Ye Jiao Teng	15 g

Flaws and Lake, p. 332

Formula name: **Zi Shui Qing Gan Yin**

Formula Actions: Enriches yin, clears heat, calms the spirit

Formula Ingredients:

Sheng Di Huang	12 g
Shan Zhu Yu	10 g
Fu Ling	12 g
Dang Gui	10 g
Shan Yao	10 g
Mu Dan Pi	6-10 g
Ze Xie	6-10 g
Bai Shao	10 g
Chai Hu	1.5-3 g
Zhi Zi	10 g
Da Zao	5 g

Flaws and Lake, p. 334

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