Emotionally-Focused Herbal Therapy

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Description: As herbalists we practice within a paradigm acknowledging that the mind and body are interconnected. Through a whole-body perspective, herbalists have much to offer in the realm of mental and emotional support. There are also potential pitfalls.

1. Interpret signs and symptoms of a client’s psychiatric diagnosis based on the DSM-V as it pertains to herbal therapy.

2. Apply somatotype theories, Eclectic use of botanicals for emotional dysregulation, stress-management techniques, diet recommendations

3. Know safety and efficacy practices: suicidal ideation, when to refer, expanding clients’ “fix-it” expectations, rapport-building skills, working within a team of care providers.
Although an extensive literature exists describing neuroanatomical, neuroendocrinological, and neurophysiological correlates of major depressive disorder, no laboratory test has yielded results of sufficient sensitivity and specificity to be used as a diagnostic tool for this disorder. Until recently, hypothalamic-pituitary-adrenal axis hyperactivity had been the most extensively investigated abnormality associated with major depressive episodes, and it appears to be associated with melancholia, psychotic features, and risks for eventual suicide. Molecular studies have also implicated peripheral factors, including genetic variants in neurotrophic factors and pro-inflammatory cytokines. Additionally, functional magnetic resonance imaging studies provide evidence for functional abnormalities in specific neural systems supporting emotion processing, reward seeking, and emotion regulation in adults with major depression. (DSM-V, p. 165).
Perception is Reality

Pathophysiology of Mood Disorders

- Problems in informational processing
- HPA hyperactivity (dysregulation)
- Limbic system
  - Emotion processing
  - Emotion regulation
  - Reward seeking
- Neurotrophic factors
- Pro-inflammatory cytokines
Normal Response to Stressor

Perception of Stress

Limbic System

Amygdala signals alarm

Hypothalamus

Sympathetic Nervous System (SNS)

Corticotropin-releasing Factor (CRF)

Pituitary Gland

Adrenocortico-tropic Hormone (ACTH)

Adrenal Glands

Epinephrine/Norepinephrine

Mobilization for Fight/Flight

Cortisol

Immune Molecules: Inflammatory Cytokines

Cortisol suppresses immune activation

Inhibits Alarm Reaction


General Adaptation Response
Hypothalamus-Pituitary-Adrenal Axis

Maladaptive Response to Chronic Stressor

Perception of Stress → Limbic System → Amygdala signals alarm → Hypothalamus

Sympathetic Nervous System (SNS) → Adrenal Glands

Epinephrine/Norepinephrine → Mobilization for Fight/Flight → Mobilization Persists → Pathological Symptoms Develop

Corticotropin-releasing Factor (CRF) → Pituitary Gland

Adrenocortico-tropic Hormone (ACTH) → Adrenal Glands

Cortisol → Immune molecules: Inflammatory cytokines

Cortisol does not suppress → Halting of Alarm Reaction → Pathological Symptoms Develop

Rothschild, B. (2000). The body remembers
Hypothalamus-Pituitary-Adrenal Axis

Hyperactivity of HPA axis is a long-lasting result from perinatal stress

- Hypercortisolemic
- Altered circadian rhythm of corticosterone secretion
- Increased glucocorticoid receptors in hippocampus
- Depression, anxiety, memory decline

Limbic System

- Emotional processing
- Emotional regulation
- Reward seeking
- Memory encoding
- Meaning and interpretation
- Perspective
- Scanning
Limbic System

- Cingulate cortex (pain and visceral responses)
- Fornix
- Corpus collosum
- Frontal cortex
- Thalamus
- Stria terminalis
- Septum (pleasure, reproduction)
- Olfactory bulb (smell)
- Mammillary body
- Amygdala (emotions)
- Hippocampus (memory acquisition)

[Link to http://neuroanatomy.wikispaces.com/F+Limbic+System]
Neurotrophins: BDNF, NGF, NT-3

- Brain-derived Neurtrophic Factor: neuronal function and plasticity
- Highly expressed in the hippocampus (memory development) and involved in etiology of depression and anxiety.
- Exposure of stress is a primary cause of mood-disorder development
  - Inhibits neurogenesis in dentate gyrus (DG) of hippocampus
    - Decreased pattern separation
    - Increased pattern completion, or generalization
  - Atrophy: Causes reduction of volume in hippocampus (decreased BDNF), structural remodeling...Brain Shrinkage
  - Epigenetic changes: BDNF gene expression and activation of its high-affinity receptor, TrkB, are necessary in the amygdala, hippocampus, and prefrontal cortex for the formation of fear memories, causing maladaptive responses.
Neurotrophic Factors

- **A neurotrophic model for stress-related mood disorders.**
- **Duman RS**1, **Monteggia LM**.

**Abstract**

There is a growing body of evidence demonstrating that stress decreases the expression of brain-derived neurotrophic factor (BDNF) in limbic structures that control mood and that antidepressant treatment reverses or blocks the effects of stress. Decreased levels of BDNF, as well as other neurotrophic factors, could contribute to the atrophy of certain limbic structures, including the hippocampus and prefrontal cortex that has been observed in depressed subjects. Conversely, the neurotrophic actions of antidepressants could reverse neuronal atrophy and cell loss and thereby contribute to the therapeutic actions of these treatments. This review provides a critical examination of the neurotrophic hypothesis of depression that has evolved from this work, including analysis of preclinical cellular (adult neurogenesis) and behavioral models of depression and antidepressant actions, as well as clinical neuroimaging and postmortem studies. Although there are some limitations, the results of these studies are consistent with the hypothesis that decreased expression of BDNF and possibly other growth factors contributes to depression and that upregulation of BDNF plays a role in the actions of antidepressant treatment.

**PMID:** 16631126
Neuronal Plasticity: Growth & Change

- Like auditions for a Broadway play
  - Structural variability of overproduction of immature neuronal structures
  - Selective stabilization of overproduced structures retains those that best represent the internal and external milieu
    - Neuronally driven. Reflects both intrinsic and extrinsic stimuli
    - Importance of Rapport Building: Interpersonal Neurobiology & Attachment Theory
    - Activity-dependent, therapy (enriched environment, exercise) PLUS antidepressant

Pro-inflammatory Cytokines

- Cytokines signal the brain to generate neurochemical, neuroimmune, neuroendocrine and behavior changes.
- TNF-α interacts with: neurotransmitter metabolism, neuroendocrine function, and synaptic plasticity.
  - Activation of HPA axis
  - Activation of neuronal serotonin transporters
  - Stimulation of indoleamine 2,3-dioxygenase leading to tryptophan depletion.
DSM-V Diagnoses
Major Depressive Disorder

A. 5+ sx during the same 2-week period and represent a change from previous functioning

1. Depressed mood
2. Anhedonia
3. Weight loss, weight gain or decrease/increase in appetite
4. Sleep disturbance: Insomnia or hypersomnia
5. Increased agitated movements, or lack of movement
6. Fatigue or loss of energy nearly every day
7. Feelings of worthlessness, excessive or inappropriate guilt
8. Diminished ability to think or concentrate, or indecisiveness
9. Recurrent thoughts of death (not just fear of dying), SI
B. Clinically significant distress or impairment in functioning.
C. Not attributable to a substance or to another medical condition.
D. Not better explained by schizoaffective disorder, schizophrenia, schizophreniform disorder, delusional disorder, or other specified and unspecified schizophrenia spectrum and other psychotic do.
E. There has never been a manic episode or a hypomanic episode.

(DSM-V, pp. 160-161)

Specify:
- With anxious distress
- With mixed features
- With melancholic features
- With atypical features
MDD with Anxious Distress

1. Feeling keyed up or tense
2. Feeling unusually restless
3. Difficulty concentrating due to worry
4. Fear that something awful may happen
5. Feeling that the individual might lose control of himself or herself

Pulsatilla
MDD with Mixed Features

1. Elevated, expansive mood
2. Inflated self-esteem or grandiosity
3. More talkative, or pressure to keep talking
4. Flight of ideas or racing thoughts
5. Increase in energy or goal-directed activity (either socially or sexually)
6. Increased involvement in risky behavior
7. Decreased need for sleep

Skullcap, Passionflower
MDD with Melancholic Features

1. Loss of pleasure in all/almost all activities
2. Lack of reactivity to usually pleasurable stimuli
3. Mood characterized by profound despondency, despair, empty mood
4. Depression worse in morning
5. Early-morning awakening (2 hr before usual)
6. Marked agitated or slowed movement
7. Significant anorexia or weight loss
8. Excessive or inappropriate guilt

St John’s Wort
MDD with Atypical* Features

1. Mood reactivity (mood brightens in response to positive events)
2. Significant weight gain, increased appetite
3. Hypersomnia
4. Leaden paralysis
5. Long-standing pattern of interpersonal rejection sensitivity (early onset, persistent)

*historically uncommon diagnosis due to lack of depression diagnosis in outpatient

Damiana, Lemon Balm, Holy Basil
Anxiety

A. Excessive anxiety and worry, occurring more days than not for at least 6 months, about a number of events.
B. The individual finds it difficult to control the worry.
C. The anxiety and worry are associated with 3+ of:
   1. Restlessness or feeling keyed up or on edge
   2. Being easily fatigued
   3. Difficulty concentrating or mind going blank.
   4. Irritability
   5. Muscle tension
   6. Sleep disturbance
Anxiety (cont.)

D. The anxiety, worry, or physical sx cause clinically significant distress or impairment in social, occupational, or other important areas of fx.

E. The disturbance is not attributable to the physiological effects of a substance or another medical condition.

F. The disturbance is not better explained by another mental disorder (panic disorder, social phobia, OCD, separation anxiety, PTSD, anorexia nervosa, somatic sx disorder, illness anxiety disorder, delusional disorder.

Ashwagandha, Pulsatilla, Fresh milky oats
Anxiety (cont.)

- Associated features
  - With muscle tension, there may be trembling, twitching, feeling shaky, and muscle aches or soreness.
  - Somatic sx: sweating, nausea, diarrhea
    - IBS, headaches
  - Exaggerated startle response
  - Autonomic hyperarousal
    - Accelerated heart rate, shortness of breath, dizziness
Anxiety (cont.)

- In early life it manifests as an anxious temperament.
- Tends to be chronic, wax and wane, across lifespan
- 55-60% are female, comorbidity with depression
- Rates of full remission are very low.
- Reports are greater in developed countries.
Anxiety (cont.)

- Risk and Prognostic Factors
  - Genetic and physiological
    - 1/3 of risk is genetic, overlapping with risk or neuroticism and shared with other anxiety and mood disorders, particularly major depressive disorder
  - Environmental
    - Childhood adversities and parental overprotection
  - Temperamental
    - Behavioral inhibition, negative affectivity (neuroticism), and harm avoidance.
Posttraumatic Stress Disorder (7+ yo)

A. Exposure to actual or threatened death, serious injury, sexual violence
B. Presence of intrusion sx associated with the event
C. Persistent avoidance of stimuli associated with the event.
D. Negative alterations in cognitions and mood associated with the event.
E. Marked alterations in arousal and reactivity associated with the event.
F. Duration is more than 1 month
G. Clinically significant distress or impairment
H. Not attributable to a substance or medical cond.
Posttraumatic Stress Disorder (cont.)

- Risk and Prognostic Factors
  - Pretraumatic Factors
    - Temperamental. Childhood emotional px by age 6 (eg prior traumatic exposure, externalizing or anxiety px) and prior mental do (panic, depressive, PTSD, OCD)
    - Environmental. Lower SES, lower ed, exposure to prior trauma, childhood adversity (economic deprivation, family dysfunction, parental separation or death), cultural characteristics (fatalistic or self-blaming coping strategies), lower IQ, minority racial/ethnic status, family psych hx. Social support prior to event is protective.
    - Genetic and physiological. Female gender and younger age at time of trauma (adults). Certain genotypes may either be protective or increase risk.
Posttraumatic Stress Disorder (cont.)

- **Peritraumatic Factors**
  - Environmental. Severity (dose) of trauma, perceived life threat, personal injury, interpersonal violence (particularly trauma perpetrated by a caregiver or involving a witnessed threat to a caregiver in children), and, for military personnel, being perpetrator, witnessing atrocities, or killing the enemy. Finally, dissociation that occurs during the trauma and persists afterward is a risk factor.
Posttraumatic Stress Disorder (cont.)

Posttraumatic Factors

- Temperamental. Negative appraisals, inappropriate coping strategies and development of acute stress disorder.

- Environmental. Subsequent exposure to repeated upsetting reminders, subsequent adverse life events, and financial or other trauma-related losses. **Social support (family stability, for children) is a protective factor that moderates outcome.**
Posttraumatic Stress Disorder (cont.)

- More prevalent in females. Attributable to the greater likelihood of exposure to traumatic events.
- **Increased suicide risk.** PTSD is associated with suicide ideation and attempts.
- Associated with high levels of social, occupational, and physical disability, considerable economic costs, and high levels of medical utilization. Impaired fx.
- **Comorbidity:** 80% more likely to have at least one other mental disorder. Overlapping between PTSD and major neurocognitive disorder.
Posttraumatic Stress Disorder CAUTION

- Work in collaboration with a mental health professional.
- Do not process the trauma with the client unless you are a trained professional (i.e., crisis intervention). It can do more harm than good.
- Boundary issues and personality disorders
- Risk-prone behavior
- Commorbidity
- Watch for suicidal ideation
Herbs to Address Pathophysiology
A pharmacologic approach
Herbs to Address:

- Serotonin, Norepinephrine, Dopamine
- BDNF
- HPA axis regulation
- Limbic system/GABA
- Inflammatory cytokine modulation
St. John’s Wort (*Hypericum perforatum*)

- Protected rats from consequences of inescapable stress
- In frontal cortex, downregulation of beta-adrenergic receptors, and upregulation of 5-HT(2) receptors
- Alters brain concentrations of neurotransmitters
- Many compounds (flavonol derivatives) anti-inflammatory actions: ↓TNF-α, NF-kB, IL-6, MCP-1 (monocyte chemoattractive protein)
- Regulates genes in HPA axis function
- Hypericin, Hyperforin, Adhyperforin
  - Inhibit uptake of serotonin, norepinephrine, dopamine
  - Binding affinity for serotonin and norepinephrine transporters
Berberine

- Coming from berberine-containing plants traditionally used for chronic skin complaints, syphilis, gastric & intestinal catarrh, hepatic torpor (Felter, 1922)

- CNS activity:
  - Inhibit MAO-A
  - Increase norepinephrine, serotonin, dopamine
  - Nitric oxide pathway involved in its activity
  - Perhaps useful in morphine withdrawal (rats)
Nervines: Neurotrophorestoratives

- Blue Vervain
- Chamomile
- Lavender
- Lemon Balm
- Fresh milky oats
- Hawthorn
- Mimosa
- Motherwort
- Passionflower
- Rosemary
- Skullcap
- St. John’s Wort

Also think aromatherapy. Many of these plants are aromatic. The olfactory bulb is directly linked to the amygdala and the cingulate cortex in the limbic system.
Adaptogens

- Alter HPA axis for anxiety, depression, CNS
  - Ashwagandha – A/CNS
  - Cordyceps – CNS
  - Holy basil – AD
  - Reishi – A
  - Rhodiola – AD
  - Schisandra – A/AD/CNS
Anti-inflammatories

- Many adaptogens
- Quercetin (bio-flavonoid constituent)
- Rosemary (Mediterranean herbs), cooked ↑
- SJW
- Turmeric
Somatotype Approach
Body Types & Temperaments

- Ectomorph
- Mesomorph
- Endomorph

- Vata
- Pitta
- Kapha
Ectomorph / Vata Remedies
Wild Oats (*Avena sativa*)

- Burning the candle at both ends.
- “Nervous exhaustion”
Wild Oats (*Avena sativa*)

- “It is not a remedy of great power and will be found effective, probably, in but few of the conditions mentioned. However, many agents of this type sometimes, in exceptional cases, accomplish that which no other remedy seems to do.”

(Felter, 1922)
Wild Oats (*Avena sativa*)

- Sweet, mild, neutral, bland
- Thymoleptic for dysthymia, anxious depression
- Anti-addictive properties
- Neurotrophorestorative: for Nervous Exhaustion featuring headaches, heart palpitations secondary to exhaustion; tired all the time secondary to emotional stress; dark circles
- Can take preventatively
Mimosa (Albizia julibrissin)

- Stagnant grief with insomnia and irritability
  “All stress is grief.” – Bob Duggan
Mimosa (*Albizia julibrissin*)

- *He huan pi & he huan hua*: Collective Happiness
- Relieves constraint, calms the spirit, regulates qi, invigorates blood
- Heart, Liver channels
- Sweet, neutral, warm, tonifying
- Bark: Relieves liver constraint leading to stifling sensations in the chest, worry, bad temper, forgetfulness, and insomnia, injuries from trauma. Yin tonic effect.
- Flower: Relieves constrained liver qi, promotes qi flow, calms the spirit, for insomnia, forgetfulness, irritability due to constrained emotions, especially when accompanied by epigastric pain and feelings of pressure in the chest.
- Allow the five spirits to open and reach outward, and eliminating extremes of the five emotions.

*(Divine Husbandman’s Classic of the Materia Medica)*
Pulsatilla, Wind flower, Pasque Flower
(Pulsatilla vulgaris)

- Shock, fright, PTSD, Doctrine of Signatures (flower closes in strong winds)
- Fear of impending doom
Pulsatilla, Wind flower, Pasque Flower

(Pulsatilla vulgaris)

“Though not of Eclectic origin, pulsatilla is one of the most important medicines in Eclectic therapy. For certain nervous phases, both in acute and chronic diseases, no remedy can exactly duplicate its action.”

(Felter, 1922)
Pulsatilla (Pulsatilla vulgaris)

- Parasympathomimetic
- Disturbed mental excitation with physical debility
- Acute anxiety, panic attacks
- Wan with feeble pulse and deficient capillary circulation, cold extremities
- Melancholy, irritable depression, tending to look at the dark side of life, Nervousness with despondency, sadness
- Mind inclined to wander
- Fixation on imperfections and compulsive behavior
- Easily inclined to weep
- Takes the unbearable edge off of emotions so they can be processed.
- Very low dose (3-10 drops 3-4 times a day)
Rhodiola (*Rhodiolae rosea*)

- Restore energy from overwork, excessive physical training.
Rhodiola (*Rhodiola rosea*)

- Cooling adaptogen
- Unlikely to cause overstimulation, a concern with pitta
- Enhance alertness, reduce fatigue, improve memory and depression
- Relieves muscle spasms
- Cardioprotective. Improves heart function
- Contraindicated in bipolar disorder.

Blue Vervain (*Verbena hastata*)

- Inappropriate anger, agitated, blow the top
Blue Vervain (*Verbena hastata*)

- Bitter, cooling
- Liver remedy: Hep C, agitation, feverish, achy
- Thymoleptic, nerve, spasmolytic, anti-inflammatory, hypotensive
Skullcap (*Scutellaria lateriflora*)

- “Nervous irritability”
- Yosemite Sam
Skullcap (*Scutellaria lateriflora*)

- Bitter, slightly sweet, slightly aromatic, neutrative, slightly cooling
- Neurotrophorestorative, mild sedative, anxiolytic, spasmolytic
- Emotional & Physical nervine, spasm, tremors, agitation from excess, restless leg, seizures, tremors
- Heart palpitations
- Things have piled up, sitting behind desk, need to be doing something, “snappy”
Endomorph / Kapha Remedies
Damiana (*Turnera diffusa*)

- Herbal Sunshine for *cold damp* folks
Damiana (*Turnera diffusa*)

- Aromatic bitter, warm and drying
- Mild nervine stimulant, aphrodisiac, thymoleptic, mild laxative
- Indication: Depression, Blues
- People who tend to get emotionally stuck
- S.A.D., winter, cold weather
- Post-partum depression
- Cautious with people with interstitial cystitis
- Add to Ginseng or St John’s Wort
Fenugreek (*Trigonella foenum-graecum*)

- Warming a cold, damp temperament
Fenugreek (Trigonella foenum-graecum)

- Carminative, dyspepsia
- Yang deficiency, for cold damp
- Lowers blood sugar, lowers cholesterol (LDL and triglyceride levels)
- Hepatoprotective
- Anti-inflammatory
- Laxative at high doses
Hawthorn (*Crataegus* sp)

- Opening the heart to give and receive love. Recommended for healing broken hearts, disappointment, anger or bitterness after a failed relationship.
Hawthorn (*Crataegus* sp)

- *shan zha*

- “It’s nature is equally harmonious and calm. It transforms static blood but does not injure newly-generated blood, and opens constrained qi but does not harm the normal qi.”

- Food stagnation

- Relieves stress, anxiety, agitation, restlessness
Lifestyle Suggestions
Enriched Environment

- Home, work, play, exercise
- Therapeutic Alliance
  - Rapport
  - Attunement
    - Compassionate listener
    - Nonjudging
    - Asking questions more than lecturing or suggesting
- Create a contract to help pace
  - Especially helpful for the ones seeking magic wellness
Stress Management Techniques

- Grounding: Feet, hands
- Breathing: Attention to nostrils, diaphragm
  - NOT always a good idea in panic when internal stimuli is the problem.
- Senses: Locate, name 3 of one sense
- Thought diffusion from ACT
- Expansion: 3 minute breathing exercise
- RAIN: Tara Brach’s work
- Name it to Tame it (Dan Siegel’s work: Identify feelings, Name them, Locate in the body.)
Food

- Protein: good sources
- Small frequent meals
- Possible food intolerances: Sugar!, Gluten, dairy, soy, corn, caffeine, chocolate
- Lots of Veg
- Low to moderate fruit: mostly berries
- Coconut oil, olive oil, fish oil, walnut oil
- Mediterranean herbs and curry spices
Potential Pitfalls

- According to American Psychiatric Association guidelines, psychotherapy is recommended to accompany antidepressant treatment. This should be followed with herbal antidepressants, too.

- Research suggests diminished results in just medication alone, and sometimes negative results. (BDNF can be pro-depressive if stimulus doesn’t change).

- Running into the “fix it” expectation
  - Pace
When to refer, enlist help, address

- SI/HI: Suicidal ideation or homicidal ideation
- Self-mutilation
- Dissociation & hyper/hypoarousal increases
- Medical complications developing
- Transference / Countertransference problems
- Dual relationships
- Inconsistent follow-ups, frequent no-shows
- Gut feeling