

# RATE, RHYTHM & STABILITY

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# Sources/Lineage

- Dr. John Shen
- Dr. Leon Hammer
- Jeffrey Yuen

# Rhythm

- involves the entire pulse
- relates to mind and emotion and nervous system
- HT controls the mind
- rhythm reflects the HT
- role of the LU and wei qi
  - controls smooth muscle contractions (HT is smooth muscle, as is gut, ie peristalsis)
  - role of respiration and evenness thereof in HT rhythm

# Rhythm, Rate and Stability

- Rhythm, stability, and rate critically impact diagnosis and treatment. “The integrity of the rhythm is the single most important aspect of pulse diagnosis,” (Hammer, 113).
- It is axiomatic in Chinese medicine that the Heart is the “Emperor.”
- Rhythm and rate are the most significant indicators of cardiac function, and overshadow the implications of all other findings.



# Rhythm

- An abnormal rhythm is an arrhythmia characterized by skipping beats, or Changing Rate at Rest (speeding up and slowing down).
  - not talking about normal HRV (heart rate variability)
- Arrhythmias are classified according to the following parameters:
  - Does the change occur at rest?
  - Is the rate measurable?
  - Are there missed beats?
  - If there are missed beats, are they consistent or inconsistent?
  - How often does the irregularity occur?
  - If no missed beats, is the change in rate occasional or constant?
  - Is it large or small?



# Rhythm

- According to Dr. Shen, all rate changes involve HT fx and are intimately connected to the nervous system (stress, defense, taiyang, wei qi).
- Instability in nervous system (jing-essence), creates poor control over brain (marrow) and destabilizes the HT (which controls the mind, and this in turn causes more imbalance in the nervous system
- Over time, sx of emotional instability increase in frequency and severity.

# Rhythm

- Etiology:
  - before age 20
  - more consistent the change, the earlier or greater the triggering event
  - worry causes the least degree of change
  - shock causes greater change
  - constitutional HT qi defic predisposes one to all arrhythmias
  - scarlet fever can lead to rheumatic HT disease and greater changes
  - with severe HT qi agitation, rate is usually rapid, esp when from shock
  - if true qi defic, rate will be more rapid immediately after shock and during early stages; later it slows except during acute stress
  - if true qi is stable, rate is more stable...

# Rate Measurable without Missed Beats

## – Change of Rate at Rest

- Sensation: The pulse speeds up and slows down.
  - The change is noticeable within a relatively short period of time
  - not to be confused with a variation in the number of beats per minute, or a gradual decrease in the rate over the course of a single examination.
- Interpretation:
  - If occasional: Heart Qi agitation.
  - If consistent over multiple examinations: Heart Qi deficiency.
  - Small changes: when from worry less dramatic than when from shock
    - if constitution strong, LDP can be tight (PC); if weak, feeble
    - 3 sources of HT qi agitation: excess heat from qi stagnation; yin defici heat; mild shock
  - Large changes: severe HT qi agitation, can progress to HT blood defici with prolonged worry. Large changes often seen in borderline psychological states.
    - often from shock of sudden moderate to large fright b/w 15-20 yrs old; if constitutional HT qi defici and working beyond means, can result in larger changes
- Symptoms: roller coaster feeling, mind racing out of control, labile moods, constant changing of one's mind, hard to focus, self doubt, agitation, nervousness, fatigue, palps, insomnia (light sleeping and frequent waking), tiredness in morning; all these are more severe with large changes. Also, anxiety, easily frightened, lives characterized by turmoil, impotence and disarray when large changes. Red tongue, esp tip, eyes confluence of blood vessels under lid.....



# Constant Changes

- Mild to Moderate HT qi defic:

## **Symptoms**

Palpitations on exertion (not as pronounced as Heart Blood Deficiency)

Shortness of breath on exertion

Spontaneous or excessive sweating on exertion that becomes more cold as it approaches Yang deficiency

Fatigue which is most pronounced in the morning

Insomnia (frequently waking throughout the night without agitation)

Slightly cold extremities (without pronounced internal cold)

Excessive talking (lack of containment of emotions)

Mild anxiety, emotional vulnerability and emotional lability

Very mild dependent edema (especially on hands and face)

Mild chest pain

## **Signs:**

Pulse: Change of Intensity on the entire pulse which is consistent, slow rate, rate change at rest which is consistent, rate change with exertion increase less than 8 b/m, Intermittent, and Interrupted. Also: Smooth Vibration or the Slippery quality in the Mitral Valve position.

Tongue: pale or normal in color. In constitutional Heart Qi deficiency there is a shallow midline crack reaching the tip. If the Heart suffers insults from lifestyle the crack becomes deeper. Swelling along edges of crack. Paleness and swelling at tip.

Inner canthus: pale

Complexion: Pale, especially on the forehead

# HT qi defic

- **Etiology**

Constitution: This includes inherited (genetic) and congenital factors.

Over-exercise and physical overwork

Physical and emotional trauma- the Heart has to overwork to overcome the stagnation from the trauma

Dampness and Heat in the blood forcing the Heart to overwork

Previous Rheumatic fever

Heart Qi Agitation

    Maciocia: Blood loss, emotional problems

In Heart Qi deficiency the Heart is vulnerable to other Heart pathologies such as Heat, Phlegm and other deficiencies of the Heart. In constitutional Heart Qi deficiency symptoms and signs of other Heart pathologies are likely to manifest sooner, in greater measure and will be more difficult to reverse.

# Rate Measurable with Missed Beats

## – Interrupted

- Sensation: The pulse misses beats irregularly, but the rate is measurable.
- Interpretation: Moderate Heart to severe HT qi defic. If occas, it is moderate HT qi agitation and mild HT qi defic.

## – Intermittent

- Sensation: The pulse misses beats regularly, rate clearly discernable.
- Interpretation: Heart Qi, blood and Yang deficiency.
- Symptoms: severe oppressive chest pain, extreme fatigue, SOB w/ exertion; cold body, esp limbs, pitting edema.
  - if not constant, HT qi agitation and/or HT blood defic usually from shock/trauma



# Rate Not Measurable with Missed Beats

## – Interrupted

- Sensation: Misses beats with no fixed cadence, and no reliably assessable rate.
- Interpretation: Severe Heart Qi and Yang deficiency. (most likely with HT blood stag and phlegm misting the orifices)

## – Hollow Interrupted-Intermittent

- Sensation: Misses beats too irregular to count rate, and Hollow.
- Interpretation: Most severe Heart Qi - Yang deficiency.



# Rhythm CCM

- Not Rested:
  - hits finger at varying strengths and substance (Changing Intensity)
  - comes to different heights (Changing Amplitude)
  - tempo will vary (Changing Rate at Rest)
- DX: unsettled; shen disturbed; lack of groundedness

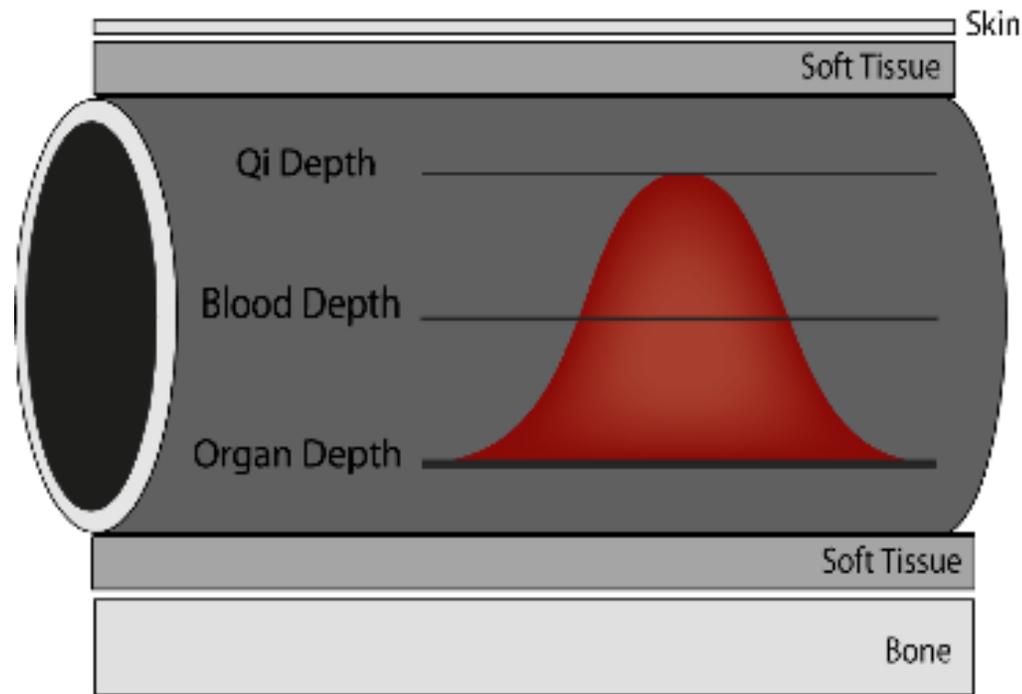
# Rhythm at Rest

## Pseudo-Arrhythmias

- These qualities are often confused for arrhythmias.
  - **Hesitant (see slide)**
  - **Changing Intensity and Amplitude**



# Normal Wave

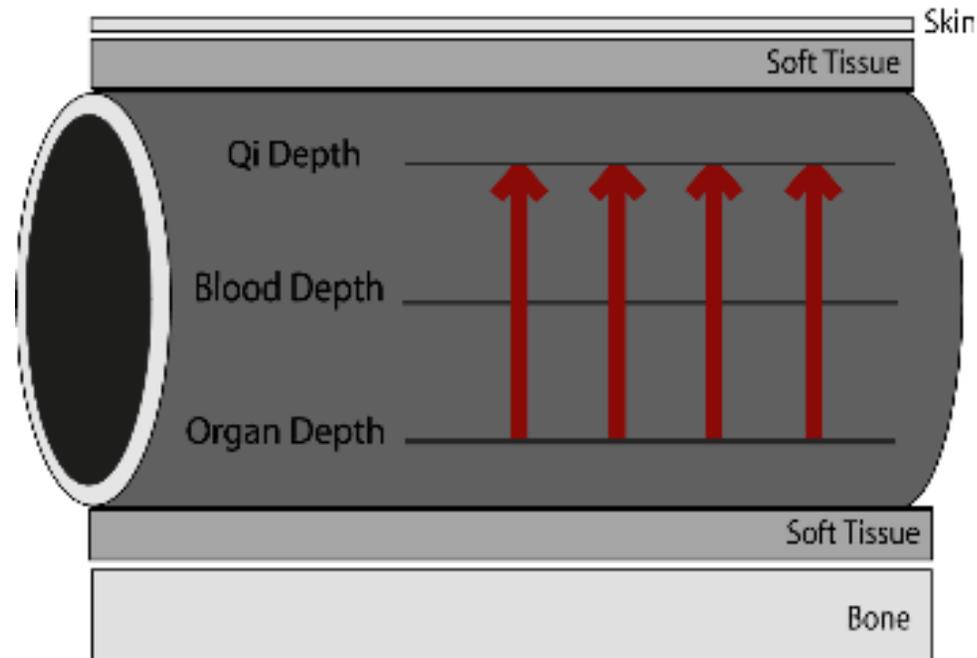


Sensation: The normal wave is a sine curve that begins at the Organ depth and gradually rises to the Qi depth, then subsides again to the Organ depth.

Interpretation: It is a sign that qi or yang activity is normal



# Hesitant Wave



**Sensation:** The Hesitant wave actually has no perceivable waveform and gives the impression of faltering and balking in between beats. It is always found on the whole pulse.

**Interpretation:** The Hesitant waveform is considered a mental “push pulse,” and indicates obsessive-compulsive behavior, and the tendency to ruminate or think on a single subject incessantly. It is a mild to moderate sign of Heart Yin deficiency.



# Rate

- Historically, rate has been correlated with conditions of heat and cold.
- In modern times, alteration from a normal rate is more often a sign of significant and far-reaching processes than just heat and cold.
- It is most frequently associated with the Heart and the Circulation.
  - Cardiac function, including factors that affect the heart such as trauma in utero, at birth, or in life, physical trauma, over-exercise, and overwork have a more enduring impact than simply hot or cold conditions



# Rate cont'd

- Rate involve the entire pulse: systemic issues.
  - occasional finding of very powerful medications causing higher rate in upper burner
- Measure for 1 minute with automatic watch
- For CCPD not measuring according to breath.
- For CCM we do.... (We will discuss both methods and clinical efficacy/importance of both systems)

# Normal Resting Rates



# Rapid Pulse

- Rapid pulse over any length of time will weaken qi, yin and blood of the HT.
- Traditionally associated with excess heat or yin defici.
- More often from HT Shock and trauma and stress on the HT and circulation.  
Often assoc with anxiety
  - Slow rate often assoc with deficiency; but pulse can be rapid in defici, too, esp under times of stress.

# Bounding

- pulse feels as if it is running away faster than the actual timed rate.
- assoc w/ extreme anxiety and panic, high fever in weak person, heat shock, occas from pain and trauma

# Rate Cont'd

- Emotional shock or trauma initially raises the rate. If coping mechanisms that protect the Heart (the Small Intestine and Pericardium) have not yet matured in an individual, or there is insufficient Qi, the ability of the Heart to return to normal function is limited.
  - For this reason, children are especially vulnerable to the effects of trauma.
- With the increase in rate, heart Qi is gradually consumed through overwork, ultimately depleting the Heart. If very deficient, there is an inability to maintain stability in times of stress, and the rate will increase far in excess of what is ordinarily appropriate to the strain.



# Rate Cont'd

- Similarly, significant physical trauma causes Qi and Blood stagnation in the periphery. In maintaining the circulatory demands of the organism, the Heart has to work harder to overcome the resistance. If there are ongoing consequences as a result of the injury, the Heart eventually tires, decreasing the rate.
- This includes any overworking of the Heart, including excessive aerobic exercise.



# Rapid Rate

- Almost always due to recent shock (over time, the Heart weakens and the rate slows).
- May also be due to 'Nervous System Tense' and stress.
- Internal and External pathogenic heat (febrile illness) must be considered if there are corroborating signs SX
- Can also present temporarily if the Heart Qi is deficient and the person is under stress



# Ext causes of Rapid

- Wind-Heat: usually sl rapid. Plus typical sx (HA, fever, sweat, thirst, cough, etc.)
- Heat Stroke: very rapid (140+), tense, hollow full-overflowing wave, or collapses to Empty.  
– heat in blood, dehydration, loss of consciousness, etc.
- Heat Exhaustion: from excess fluid loss with heavy sweating; rapid and feeble. Also low blood pressure, cold pale clammy skin, possible disorientation, fatigue, anxiety, loss of consciousness

# Internal-External Causes

- Heart:
  - Mild HT qi agitation: superficial vibrations, sl elevated rate; worry
  - Mild excess heat in HT: tight at PC, moderate elevation of rate; long term worry
  - Moderate to severe HT qi agitation: also changing rate at rest, moderate to severe elevation of rate; roller coaster emotionally
  - HT yin defic: relatively rapid (84-90) with more severe sx of irritability and restlessness, insomnia tossing and turning all night...<sup>26</sup>

# Rapid: Internal Conditions

- Excess heat: pulse also very Tense
  - Heat in Qi level: rapid, tense, slippery at organ or all depths if chronic/severe or flooding excess. often fever, infection/inflammation of organ (find location of flooding excess and most tight position)
  - Blood Heat: sl rapid rate; can be from excess or defic
  - Blood Thick: often with Rob Pnd, moderate rapid or bounding quality, slippery, choppy, later tense-tight HFO
  - NST: constitutional or lifestyle induced stress, frustration, etc. Tense pulse and thin tight at Qi → yin defic
- Yin defic heat: pulse tight, wiry, leather-hard (less rapid than above)
  - Wind: consequence of sep y/y in LR and attacking vulnerable organ
  - Entire pulse without wind: tight sl rapid from defic yin, occas thin from blood defic. Can create nervous system tension/irritation; can be from overwork, illness, alcohol and lifestyle, overthinking and worry, spicy foods, etc.
  - Entire pulse with wind: floating tight. If severe, very tight HFO (impending stroke....)
  - Individual Positions: hardening/tightness in organ

# Rapid: Int etiology (no heat)

- Imminent hemorrhage: rapid, leather, hollow; blood depth totally absent and qi depth very hard
- Pain: tight, wiry, biting (intestines)
- Acute phase of chronic illness: often with Flooding excess or deficient depending on integrity of terrain/constitution
- Shao yin heat patterns: yin defic losing control over yang...form of Qi wild...
- Sudden cessation of exercise or heavy work: yielding HFO. Qi wild...

# Slow Rate

- Related more to Heart fx and the circulation of blood than to either excess or deficient cold.
- Usually indicates Qi or Yang deficiency of the Heart, but may also be due to:
  - poisoning (toxicity -- very slow),
  - exercise beyond one's energy, or
  - late-state atherosclerosis



# Slow : External causes

- Cold from external excess: stagnation of wei and ying from EPF. Floating tense slow

# Slow : Internal causes

- Cold from defici: qi/yang defici:
  - chronic disease, overwork, overexercise, sex beyond one's energy, chronic emotional strain.
  - Lack of qi causes diminished circulation
- HT qi and yang defici
- Aerobic exercise

# Slow : Less common

- LR qi stagnation and deficiency: diminishes peripheral circulation and slows pulse by depriving circulation of its impetus to move qi and blood thru vessels. Slow and Tense. Often the diminished movement in another organ such as ST, with slowing of peristalsis
- Internal excess heat: late stage Blood Thick: Ropy and Tense slow. From increased viscosity of blood (accum of lipids, plaque, heat) which outweighs the etiology of heat over time....
- Yin deficiency: late stage arteriosclerosis: Ropy Slow. vessels lose elasticity, rate initially increases, but HT becomes taxed over time....
- Toxicity: very slow and deep. Often under 50bpm. Blood Unclear finding as well.
- Medications: beta blockers and calcium channel blockers
- Shock: unresolved physical or emotional; over time depletes HT

# Slow : Uncommon causes

- Cold from internal excess: from cold foods and drink over long time; use of cold applications to treat pain (icing); bathing in cold water; poor winter heating or attire due to poverty or neglect.
  - Slow Tight.
  - can lead to blood stagnation, ie choppy pulse in deficient areas of body

# Wide variations

- different rates at different times over course of evaluation:
  - HT qi defic

# Rate on Exertion

- The Heart and Circulatory system should respond to the energetic demands of movement within certain parameters.
- An increase of 8-12 beats/min is considered normal.
- Changes outside this range are considered pathological.



# Rate on Exertion Cont'd

- To assess, instruct the patient to stand and swing the arm vigorously in a circle approximately ten times.
- Using the other arm, immediately check the rate for ten seconds, and multiply the number by six.
- Compare to rate taken at the end of the pulse examination.



# Rate on Exertion Cont'd

- Rate increases by 8-12 beats/min - **Normal**
- Rate increases by  $> 12$  beats/min - **Heart blood deficiency**
  - Between 13-18 bpm: Mild
  - Between 19-28 bpm: Moderate
  - Between 29-35: Severe
  - Between 35-45: Very Severe
  - Above 45: Extremely Severe
- Rate stays the same or rises by  $< 8$  beats/min - **Heart Qi deficiency**
- Rate decreases – **severe Heart Yang deficiency**



# Speed (CCM)

- speed: relative to breath (of patient)
  - if rapid: fu channel. Can indicate heat: bleeding
  - if slow: zang. Can indicate cold: moxa
- Rate of arrival, Flooding, Robust Pounding

# CCM rates

- Rapid: >4 beats per breath of patient
  - 5 beats: sl rapid
  - 6 beats: rapid
  - 7 beats: very rapid
- Slow: <4 beats per breath
  - 3: slow
  - 2.5: very slow (5 beats per 2 breaths)

# Speed (CCM)

- speed: reflection of the amount of excitement/animation/urgency one feels about who one is.
- Rapid is urgency; slow is hesitation.
- Cold and heat as metaphors as one's temperature/temperament.

# Speed (CCM)

- Relative to breath of patient
- Differences in individual positions (not systemic)
  - CCPD rate over entire pulse
  - CCM rate in individual positions

# Speed : Wood

- Wood quality looks for things greater in life; good leaders, etc. Pulse can get more rapid and animated as tap into that in patient.
  - yang element/phase
  - ambition, goal oriented, grows upwards
- discharge/detoxify=if liver wants to do things too fast, it tends to fire, wood is always sl.  
Rapid
- Focus on goal. Eyes can see to distance and can get ahead of oneself. Moving too quickly = heat

# Speed : Fire

- \*speed=should be slightly rapid, animation/  
excitement, this urgency in life
  - Emperor, quest, about conquering
  - Desire, excess joy (mania)
  - relationships, need to connect

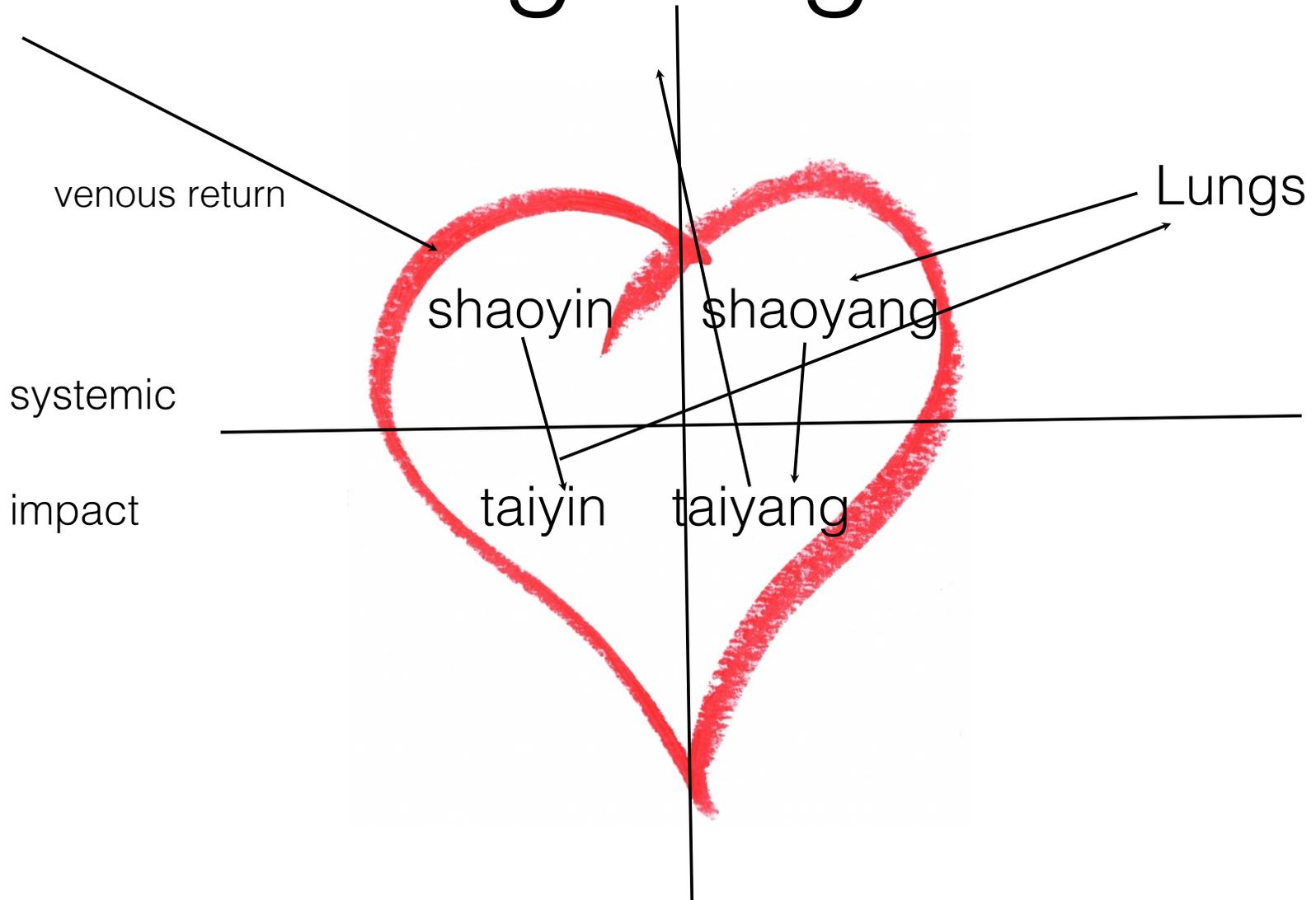
# Speed : Earth

- On the moderate level, stomach should have more speed post
- in general, if its harmonized, the moderate should be more fast than the deep level, relatively speaking.

# Speed : Water

- Yin element/phase: about nurturing, acceptance, quietude
- Rapid reflects a progression of the inability to accept and to surrender to one's life/fate/ming.
- The kidney intrinsically is a soft quality. It should not be wiry. It could be tight if it wants to hold on to its essence. If wiry (esp left KI, means that one is lacking acceptance of what their life is about.
- If one is resistant to their destiny, they stagnate. Pulse becomes very wiry, the stagnation of jing (concept in Ming/Song). The stagnation in the dissemination of their essential qi.
- Stagnation creates heat → rapid....
- Relationship of KI to LR: LR's drive/ambition financed by KI yang. Inability to retreat can create hyperactivity of yang qi and lack of root (e.g., menopause)

# Wang Qing-ren



# Treatment Strategies

- Calm shen, reduce tension in nervous system and calm wei qi hyperactivity (or strengthen), clear heat from PC, nourish yin, communicate HT/KI,
  - Acupuncture:
  - Herbs:
    - Single: guizhi, rougui, maimendong, xiyangshen, wuweizi, shengdi, baihe, lianzixin, huanglian, yejiaoteng, gancao, ejiao, suanzaoren, guiban, fuxiaomai, longgu, hupo, daizheshi, baiziren, yuanzhi, shichangpu, hehuanpi, niuhuang, dengxincao, danzhuye
    - Formulas: Sheng Mai San, Tian Wang Bu Xin Dan, Fu Shen Tang, Huang Lian E Jiao Tang, Gan Mai Da Zao Tang, Zhi Gan Cao Tang,
  - Essential Oils:
    - orange (blood, bitter), lavender, geranium, rose, sandalwood
  - Diet:
    - chia seeds, tart cherry juice (sour consolidates), bitter greens (drain/descend), beets (anchor and strengthen blood)

# Acupuncture: Primary channels

- HT/PC 3,4,5,6,7,8.
- KI shu points, KI 16,10,9,7,6,3,2,1.
- BL 67,60,58,40, BL shu points related to HT and circulation and wei qi (23,22,18,17,15,14,13)
- SI 18,16,10,5,3,1.
- SJ 3,4,10,16, 21, 22
- GB 21,22, 34, 41
- LR 2,3,8,14
- LU 1,2,7,9,10
- LI 4,11,15,18
- ST 40,41,44,45,30,25,15 (and ST shu points), ST 12,9,5
- SP 2,4,6,10,20
- Ren 17,15,14,7,6,4.

# Sinew Meridians

- ST SM and heat (wind-heat or heat moving towards interior),
- tai yin and wei qi in chest
- HT SM and wei qi in chest; HT/KI communication (channel binds at KI 16)
- PC SM, LU and LI SM and influence on chest

# Divergent channels

- BL/KI: jing.
- GB/LR: blood.
- ST/SP: jin (thin fluids).
- SI/HT: ye (thick fluids) and blood.
- SJ/PC: qi.
- LI/LU: yang.

# Luo Vessels

- Great Luo of ST: pulsating vessel under left chest/breast.
- Great Luo of SP (Da Bao/Bao mai/Dai mai).
- LU luo (hot palms, fidgeting, heat in chest).
- HT/PC luo (sticky chest/oppression).
- ST luo and mania. Dian Kuang. Heat entering interior.
- BL/KI luo and panic, re-setting of alarm state, PTSD.

# 8X channels

- Chong mai: blueprint, HT/KI connection, bringing SP blood to HT to cool desire/heat, animates shen, etc. KI shu points on chest.
- Yin wei: bringing essence to earth, wood, chest, throat (shao yin goes to throat and root of tongue and tip), back to Ren mai and nourishment, contentment
- Du mai and Yang Wei mai: source of yang, bring up or descend/anchor, reconciling our past and significant events/traumas
- Ren: HT/KI communication, nourish fluids to cool, contentment, anchoring to lower dantian; how was person nourished/nurtured, bonding, boundaries (earth and containment of qi or leakage....)
- Dai mai: open middle/pelvis/chest (3 Dai mai) to allow descension, release pent up emotions stored and swept under the rug (long term stagnation and creation of internal heat; LR/GB aggressively moving to HT)
- Qiao vessels: meet at BL 1 beginning of wei qi arousal/stimulation/sedation; how one sees oneself (esteem, worth) and how one stands up to the world...(poor self esteem/worth creating depression/inhibition of HT qi with damp in chest....or need to compensate and be aggressive with need to prove self and accomplish....)

# Herbal Treatments

## For Heart Tight

Shi Chang Pu	Hb. Selaginellae Doederleinii	2.4 gr
Chuan Xiong	Rx. Ligustici Wallichii	4.5 gr
Mu Xiang	Rx Saussureae seu Vladimiriae	4.5 gr
Fu Shen	Proia cocus	9 gr
Yuan Zhi	Polygalae Multiflorae	4.5 gr
Suan Zao Ren	Zizyphus	9 gr
Yu Jin	Tu. Curcumae	9 gr
Gua Lou Pi	Fr. Trichosanthes	9 gr
Chen Pi	Citi Reticulatae [tangerine Peel]	6 gr

### (1) **Heart—Closed** [The block of the Heart]

Take off

Gua Lou Pi and Chen Pi,

Add

Huang Lian 1.8 gr and Chen Xiang 2.1 gr

### (2) **Heart-Small** [The narrowness of Heart]

Add Ding Xiang - Caryophylli 2.4 gr

### (3) **Fullness of the Heart** [The enlargement of the Heart]

Take off

Gua Lou Pi

Chen Pi,

Add:

Huang Lian 2.4 gr

Chen Xiang 2.1 gr

Wu Wei Zi 4.5 gr

Mu Li 15 gr

Mai Dong 9 gr

## 4. **Heart Vibration**

Deng Xin Cao Md. Junci Effusi

# Herbs

## **Hyperactivity- patient aged 5 years** [Suggestion was shock at birth]

Shi cang pu 3g	Acorus 3g
Chuan xiong 3g	Cnidium 3g
Chao Jing Jie 5g	Baked schizonepata 5g
Hei fang feng 5g	Baked siler 5g
Mu xiang 8 Feu=3g	Saussurea 3g
Zhu fu shen 10g	Fu shen 10g (plus Zhu sha)
Chao zao ren 12g	Stir fried zizyphus 12g
Long chi 25g	Dragon teeth 25g
Ci shi 25g	Magnetitum 25g
Huang qin (8 fen)	Scute 3g
Jiao gu ya 12g	Oryza sativae germinatus(rice sprouts)12g
Jaio Mai ya 12g	Horddei vulgaris germinatus 12g
(zhu sha) Deng xin cao	(Zhu sha) and juncus 3 bundles

# Herbs

## **ADD [For a teenage boy]**

Dang Gui	6 gr
Chuan Xiong	4.5 gr Lingustieum Wallachi
Bai Zhi	4.5 gr Angelica Root
Sang Ji Sheng	9 gr Loranthus
Fu Shen	9 gr Poria Cocus (Schw) Wolf
Yuan Zhi	6 gr Polypala Tene Foliae
Sheng Di	9 gr Rehmonia
Tu Si Zi	9 gr Cuscuta
Long Chi	15 gr Dragon's Teeth
Ci Shi	15 gr Magnetite
Shan Zhu Yu	9 gr Cornus
Shen Qu	9 gr Medicated Leaven
Deng Xin Cao	3 Bundles Juneus
Xi yang shen	4.5gm
Ren Shen	4.5gm
Zi He che	4.5Gm

# Dr. Hammer formula

## SHOCK and/or Arrythmia

### 1. Sheng Mai San

American Ginseng	Xi Yang Ren	9gm
Ginseng	Ren shen	9gm
Ophiopogon	Mai men dong	9gm
Schizandra	Wu wei zi	6gm
Korean Ginseng	Hong ren shen	4.5g
Cinnamomum	Rou Gui	3gm
Aconite	Fu Zi	0.25gm
Acori Graminie	Chang Pu	9gm
Cs. Polygoni Multiflori	Ye Jiao Teng	6gm
Placenta	Zi He Che	2gm
Albizzae	He Huan Pi	8gm
Dragon Teeth	Long Chi	9gm
Curcumae	Yu Jin	5gm
Zizyphus	Suan Zhao Ren	9gm
Rx. Polygoni Multiflori	Ho Shou Wu	9gm
Biotae Seed	Bai Zi Ren	3gm
Salvia	Dan Shen	6gm
Glycyrrhiza	Gan Cao	3gm
Zingerberis	Gan Jiang	3gm
Licorice	Gan Zao	3gm
Wheat	Tritici Aestivi Levis	20gm
Jujube	Da Zao	10gm
Polygalae Tenufoliae	Yuan Qi	6gm
Ligusticum Wallachi	Chuan Xiong	3gm
+		
Fluorite	Zi Shi Ying	6gm
Succinum (Amber)	Hu Po	1gm

# Dr. Hammer Formulas

## HEART SEPARATION OF YIN AND YANG, BLOOD AND QI DEFICIENCY

[Dr. Hammer's Heart formula based on Astragalus & Ziphyphus

Yi Yang Shen	4.5 gm	American Ginseng
Korean Ginseng	4.5 gm	[Cooked in Aconite]
Fu Zi	0.25gm	Aconite
Zi He Che	4.5 gm	Placenta
Bai Zi Ren	4.5 gm	Biota Seed
Long Yan Rou	6.0 gm	Longan
Suan Zao Ren	6.0 gm	Zizyphus
Yue Jin	6.0 gm	Curcumae [Tuber]
Shu Di Huang	9.0 gm	Rehmannia [Cooked in W.
Ye Jiao Teng	9.0 gm	Polygalae Multifloriae
Yuan Zhi	9.0 gm	Rx Polygalae Tenuifolae
Sha Ren	1.5 gm	Fr. Seu Se. Amomi
Fo Shou	3.0 gm	Fr. Citri Sarcodactylis
Dan Shen	9.0 gm	Salvia
Mai Men Dong	6.0 gm	Ophiopogon
Chang Pu	6.0 gm	Acorus
Gan Cao	3.0 gm	Licorice
Chuan Xiong	4.00gm	Sezchuan Lovage
Long Gu	5.00gm	Dragon Bone

# Formulas

- Fu Shen Tang: Fu Shen, Ren Shen, Yuan Zhi, Fang Feng, Rou Gui, Du Huo, Long Gu, Xi Xin, Gan Cao, Bai Zhu, Gan Jiang, Suan Zao Ren
  - Calms shen, settles will, protects from exterior, opens ming men, scatters cold, invigorates blood, strengthens original qi and brings things to exterior
  - strengthens wei qi/LU responsible for smooth muscle contraction....

# EO

**Excitement/Anxiety/Agitation/Vexation** in small dilutions  
(1%-2%)

- | Orange: clears HT fire. Arrhythmia, palps, tachycardia. Can use for wind heat, too.
- | Neroli: steam distilled orange blossom. Also for HT fire. For severe trauma and shock to the HT. soothes and relaxes muscles, great for atrial fibrillation; chest pain, hysteria
- | Frankincense: wounded in past, how have we licked our wounds and how have others come to assist us. Someone who exaggerates their suffering (anxiety). Opens diaphragm, expectorant; treats ulcers internally
- | Melissa: HT fire
- | Sandalwood: opens chest, prevents it from keeping it in chest
- | Myrrh: with wounds that won't heal; chronic non-healing wounds; cry babies. Things we don't want to heal; returning to points in our life that we relive; PTSD. Treats and clears ST fire, esp at it travels up (can't talk about it; plum pit throat), hyperthyroidism, tachycardia, never content so always hungry, burning things up, can't sleep b/c mind always racing

# EO

- **Nervousness:** HT affecting the LU. Volatile. Tip of tongue shivering/trembling. These oils have sesquiterpenes.
  - Cedarwood: Himalayan. Sense of protection (wood law of signature); deals with clearing LU heat/judgment/inadequacy. Treats hot phlegm; treat wind and itching, esp genital and HPV.
  - roman chamomile: flower. Increases WBC, increases protection.
  - Palmarosa: deals with someone who is prone to being infected by others (thoughts, feelings); good for allergies, sensitive to environment, what others think of you. Good for pestilent factors; clears wind heat and infections.
- **Irritability/agitation:** fan: non-voluntary movement (brain and muscles) insomnia; more energy at night
  - Sandalwood
  - roman chamomile
  - cistus
  - Melissa
- **Restlessness/vexation:** zao: (brain); insomnia
  - Vetiver: antispasmodic. Good for restless legs, too
  - Lavender
  - Lemon: person wakes in middle of night with cramping, Charlie horses; gout. Clears ST and LR fire.
  - clary sage: deals with LR wind, spasms, tremors.
  - carrot seed: nourish LR blood
  - sweet marjoram: treats LR fire, HBP, breaks hot phlegm.

# EO

**Joy** : extreme happiness can be pathological; tries positive thinking for everything which can be taxing; failing to recognize that things are the way they are. Joy with effort

- | Spikenard: anchors the HT. similar to vetiver b/c treats LR wind. Spikenard though treats HT fire which vetiver does not.

- | Neroli: HT fire

- | Lemon verbena: top note. Treats HT fire and LR fire.

# EO

## **Grief/Sorrow:**

- | Eucalyptus: helps to let go; radiata to open sensory orifices; or globulus, dives if chronic with phlegm (same for polybractea, smitthi); expectorant
- | Spikenard: into depths of one's sadness; penetrates deeply; for too much upward energy; facial tics, tremors, HBP; affect on LU is that it makes you come to terms with your sadness.
- | Cypress: needle oil that affects LU. Astringent. Travels back down. Similar in breaking up phlegm, astringing back to constitution so we can reflect; help KI to grasp LU qi
- | Nutmeg: astringes KI
- | Palmarosa: also good for anxiety/excitement; soothing oil

- **Difficulty in expression** often when sad, don't know what to say; movement from LU to HT. then go thru mourning and dealing with loss; then period of bereavement; then reintegrate self back to society; compensation; regrets
  - Vetiver: goes to deep chambers of KI, darkness of mourning, helps to nourish the blood, seeks comfort internally and finding comfort with memories, that there is still you to comfort self.
  - Pine: descends to KI, warming, (good for asthma and low back pain); gives integrity to support self. First need to come to terms with self and your circumstances.
  - Mimosa: acacia. Impt oil for guilt, remorse; treats fire toxins, calms shen. Difficulty lies in the idea that you still feel separated from that which you lost.
  - bay laurel: breaks phlegm
- **Bereavement** period of isolation and don't want to come out. Depression.
  - Cypress: astringent; breaks phlegm; descends LU qi and promotes urination (bodily tears).
  - Benzoin: astringent; transforms damp; diffuses LU as astringes HT.
  - Patchouli: affects Chong mai; renewal, rebirth, blueprint of life. Extracted from dead dried up fermented leaves. Represents resurrection; dead coming back to life. Treats parasites, summer heat, exorcisms, crying a lot (diffuse)
  - atlas cedar: mucolytic
  - camphor: deals with sudden shock (fainting and use of smelling salts b/c opens portals)
- **Tendency to cry a lot**
  - ylang ylang, patchouli, geranium (nourishes yin; can be compensation/replenishment)
- **Regrets:** phlegm, redemption
  - pine, fir, mimosa, cypress, juniper, atlas cedar

# EO

**Worry** earth/metal: overthinking about loss, grief, sadness

- | Bergamot: uplifting, good for generalized anxiety disorder, brings wei qi up, relaxes as goes to mouth region (excessive internal talking), cooling. Vulnerability.
- | Fir: silver, balsamic, douglas. Tonifies LU qi. Expectorant. Sense of vulnerability. Gets rid of phlegm.
- | Clary sage: person who always blames themselves when something goes wrong. Makes them worry b/c take on too much responsibility and damages KI. Regenerative/nourishes yin. Treats panic attacks, phobias, running piglet. LR fire/wind.
- | Sage: ST fire. Oral cavity like bergamot, movement of mouth/tongue; fixation with talking; oral fixation/stage. Yin defic.
- | Myrrh: worries b/c of previous accidents, traumas, wounds that won't/don't want to heal. Mistakes from past that haunt us in present.

# EO

## Fear:

| Generally **florals** combined with **spice** (thought processes that helps us overcome our fears, i.e., anise, fennel, caraway, coriander, cardamom/ nutmeg for HT). Flowers deal with upper, esp LR and HT. fear is lack of communication b/w HT and KI. b/c of its consolidating energy, it prevents water/KI from displacing jing/essential qi to respective organs.

| Consider what the fear is of: water displacement to.....

- wood – failure, change:
  - Melissa, lavender
- fire – love, appropriateness. I'll never have happiness or relationship in my life... Always afraid I'm not doing something proper...
  - orange blossom
  - rose
- earth – gossip, attention, being noticed
  - roman chamomile
- metal – judgment, vulnerability/getting hurt, letting go
  - ylang ylang
- water – self, sexuality
  - rose
  - jasmine
  - narcissus

# EO

**Shock/Fright** `jing' (capitol: where HT ruler is located); need to resuscitate yang

| Black pepper: warms the interior; unfreezes; good for Raynaud's, bi syndrome

| Basil: good for taiyang meridian

| Peppermint: acute resuscitation; restoring yang

| Fennel: HT/KI communication

| Vetiver: travels down into fear itself and moving with that energy; shaken up with fear (antispasmodic)

## **Cynicism:**

○ Mimosa:

○ Yarrow: I Jing stalks. Helps with wind/change, relaxes muscles, helps to bring about the yang (releases wind heat); breaks hot phlegm; strengthens SP qi and perseverance (KI 1)

○ Pennyroyal: mint family. Toxic. Stimulates bile/courage to have resources available for struggles of life.

# EO

## | **Insomnia:**

- Sandalwood: opens chest, allows to increase breathing capacity to allow for sleepiness
- Valerian: sesquiterpenes; cooling to blood, relaxing, clears HT fire; clears wind, restlessness, tossing and turning
- Cistus: astringes, deepens breath
- Hops: spicy, sweet, cooling, amberish color; establishes HT/KI communication; good for asthma, coughing b/c relaxes chest, brings communic down from HT to KI; improves concentration/meditation; useful for menstrual cramps (eases cramps)
- Rosemary: small amount to protect wei qi during sleep state

# EO

- **1. Anti-depressants/Stress management:** for stress and tension building up: chamomile, orange, tangerine, lavender, Melissa, neroli, petitgrain, rose, sandalwood, valerian (top note)  
top note for acute issues; base for chronic
- **2. Tranquilizing (for anxiety):** chamomile, fir (warming), orange, petitgrain, rose, geranium, marjoram, juniper, nutmeg (warming)
- **3. Nightmares (fear):** see oils above for fear.  
if vulnerability – citronella (esp for kids who hear voices at night or see things. Wards off insects, ghosts, etc.), mandarin, orange, neroli; angelica seed (archangel); rosemary

# EO

## o Emotional Extremes

- mania/hysteria/aggression: all yang disorders
  - | clary sage, sandalwood (for pent up emotions – stagnation in chest), atlas cedar/cedarwood (esp Himalayan), vetiver (addresses blood deficiency and hysteria), neroli, germ cham, yarrow
- delirium: valerian
- withdrawal/isolation/phobia/paranoia: jasmine (for low self esteem – suicidal), ylang ylang (addresses inadequacy we feel), bergamot (brings the yang up, opening up the shades of one's life, to see further into life, see illumination, its an invitation), grapefruit (break up accumulations, its outside help), mimosa (for those who feel burnt out, treats fire toxins)
- isolation/loneliness; narcissus with bergamot
  - narcissus is the water immortal, only needs water to grow in, as long as you give a little water it'll grow, just like loneliness.  
narcissus+bergamot
- bipolar: cedarwood, ginger, ho leaf, rosewood, camphor (diffuse)
- obsession/compulsion: clary sage/sage, cedarwood, sandalwood
- depression/melancholia: stimulate wei and LU qi.
  - | basil, bergamot, pine, fir, spruce
- stubbornness/frigidity: the inability to change. the person who doesn't want to do anything different.

# Case Study 1

- Male 40 cc back pain
- HT rate 40 bpm (11am; after 2 cups of coffee and hours of stressful work phone calls)
- hx athlete (basketball)
- Rvib; Ropy and early Leather-Hard
- LDP absent <—> vague Muffled (4) tense
- RDP absent <—> vague Muffled (5) tense, occas inflated
- LPP: thin tight feeble

# DX

- HT shock, yin-blood defic; HT qi defic (sev); moving towards sep y/y
- LU qi defic (sev); moving towards sep y/y
- neoplastic stag of all substances in chest and trapped qi
- yin-essence defic; yin-blood-essence defic
- NST
- blood stag in LR/GB
- KI yin and yang defic

# TX

- Initial focus: HT shock and qi, KI yang, anchor, open chest (father died a year ago; very close relationship)
- Acupuncture: BL/KI DM
  - BL 10,40 DSD, BL 15, 23, 32, shi qi zhu xia, KI 9
- Herbal: xi yang shen, mai men dong, wu wei zi, gui zhi, rou gui, fu zi, sha ren, huang qi, mu xiang, du huo, qiang huo, sang ji sheng, zhi gan cao
- Essential Oils: litsea, cinnamon leaf, basil, camphor

# Case Study 2

- Male 82 cc aortic flutter and stenosis (scarlet fever as child)
- HT rate 50s and 60s; Interrupted and Changing Rate at Rest; Blood Thick; LDP Rob Pnd (4), Chaotic; Changing Intensity (3+); Muffled (3)
- RDP chaotic
- RPP Empty stage II
- LPP Leather-Hard
- Blood Thick
- choppy and Rvib

# DX

- HT sep y/y; HT Shock, HT qi-yang defic;  
HT blood-essence defic; HT blood stag;  
Blood Thick
- NST; LR blood stag; toxicity
- KI sep y/y, yin-blood-essence defic
- LU sep y/y

# TX

- Initial Focus: stabilize and strengthen HT and KI (qi and blood), calm nervous system, clear heat and invig blood, anchor
- Acupuncture:
  - 8x: Chong mai and Yin Wei mai
  - DM: BL/KI, SI/HT, SJ/PC
- Herbs: lots of different ones over the years
  - ren shen, xi yang shen, wu wei zi, dan shen, gui zhi, fu zi, sha ren, sheng di
- Essential Oils: neroli, fennel, frankincense, thyme geraniol (geranium)

# Case Study 3

- Male 47; trying to prevent HT transplant
- cardiomyopathy; can't lie flat, SOB, swollen legs, fluid in LU, asthma as child
- changing rate at rest; Interrupted; rvib
- rate 100 (2 months later 60)
- LDP slippery, muffled, change of amp (3)
- RDP absent  $\longleftrightarrow$  tense diffuse muffled (5); SLP  $\longleftrightarrow$  absent vague
- RPP:  $\longleftrightarrow$  diminished/feeble

# DX

- HT shock: severe HT yin and qi defici; HT blood stag and stag of all substances; phlegm stag in HT
- LU neoplastic, parenchymal damage, positive pleura
- KI qi defici

# TX

- Initial Focus: Calm HT shock, stabilize HT and LU, strengthen qi, clear orifices and phlegm in chest
- Acupuncture: HT 7, PC 6,7, LU 9, Ren 17, 15, KI 3 (occas SP 3,6,9)
- Herbs: many formulas over time
  - huang qi, gui zhi, gan jiang, ban xia, jie geng, zhi gan cao, xi yang shen, mai men dong, wu wei zi, yuan zhi, shi chang pu, bai zhu, zhi ke
  - gua lou pi, yuan zhi, suan zao ren, huang qi, jie geng, dan shen, fu shen, yu jin, huang lian, chen xiang, shi chang pu, xiang fu, xi yang shen
  - sheng di, bai shao, chuan xiong, yuan zhi, zhi gan cao, dang gui, xiao hui xiang, si ni bei
- Essential Oils: not prescribed (benzoin, geranium, fennel)

# Case Study 4

- Male 61 heart attack; right bundle branch block, 3 blocked arteries, ruptured colon and diverticulitis, sleep apnea, ventricular tachycardia
- rate 60 pacemaker (other rates 36), changing rate at rest, interrupted, ropy, choppy, LDP Leather-Hard Empty tight, Changing Amp (4)
- RDP: muffled (5)
- LMP: Empty, Rob Pnd (4); spinning bean proximally; KI Empty bilaterally
- discussed w/ cardiologist on phone: pacemaker counts PVCs in rate of 60. (PVCs happening on average 1x/7 beats). cardiologist sees no problem....
  - my opinion is this is very dangerous as PVC is not a functional beat, diminished blood in ventricle, more blood stasis, etc.

# DX

- Sep y/y in HT, KI, LR
- Severe HT qi defic, stag of all substances in chest (wei qi), yin-blood-essence defic and hardening of tissues/arteries, yin-essence defic and heat vulcanizing vessels and thickening blood

# TX

- Acupuncture:
  - patient hypersensitive requiring few needles limited to arms, torso and legs
  - PC/HT points (PC 3,4,6,7, HT 3,5,6,7), GB 22, Ren 17,15,14, LU 9, 1, ST 15
  - Yin Wei mai and Chong mai (bring yin-blood, qi to chest)
  - if allowed: GB/LR DM; SI/HT DM
- Herbal Medicine: also many renditions.....
  - mai men dong, wu wei zi, xi yang shen, chen pi, fu ling, fu zi, sha ren, chai hu, yin yang huo, mu xiang, ren shen (later adding xiang fu, zhi gan cao, hu po, dai zhe shi, tian ma and removing chen pi/fu ling)
- Essential Oils:
  - angelica, benzoin, geranium, fennel, orange in safflower oil

Q & A