

An anatomical illustration of the human torso, focusing on the thoracic and abdominal cavities. The heart is depicted in the center, with its major blood vessels (aorta and pulmonary artery) shown in red and blue. The small intestine is visible below the stomach, coiled and colored in a light pinkish-red. The background is a pale yellow, and the entire illustration is overlaid with a grid of colored dots (red, green, blue, purple) and thin black lines, suggesting a digital or scientific overlay. The title "The Function of Heart and Small Intestine" is centered over the heart area in a large, dark blue serif font. The author's name, "Joseph Audette, MD", is centered below the title in a smaller, black serif font.

# The Function of Heart and Small Intestine

Joseph Audette, MD

# The Heart – Hand Shao Yin

- The Heart is considered a special organ in Chinese Medicine; called the Ruler of the other organs but also unique in that the treatment of heart related issues is usually done through other yin organs (SP, KD, PC, LV, TW)
- Yellow Emperor asked, “The hand shao yin vessel alone has no shu [transformation], what does this mean?”

*Qi Bo answered, “The shao yin is the vessel of the heart, the heart is the great controller of the 5 yin and 6 yang organs. This is the place where jing and shen stay. This yin organ is tight and hard. Evil can not be accepted here. When evil is accepted, this means the heart will be injured, the shen will leave and this means death. Therefore, every evil [that would come to the heart] will stay at the wrapping luo of the heart [the pericardium]. The wrapping luo is the vessel of the master of the heart.....*



# The Heart – Hand Shao Yin

## – Hand Shao Yin

- Energetically connected to Foot Shao Yin (Kidney)
- Yang Pair: Small Intestine
- Prenatal Jing and Shen combine to form Shen which in turn directs the Jing through the body
- Equates with the concept of the Mind in Western Medicine – *Shen*

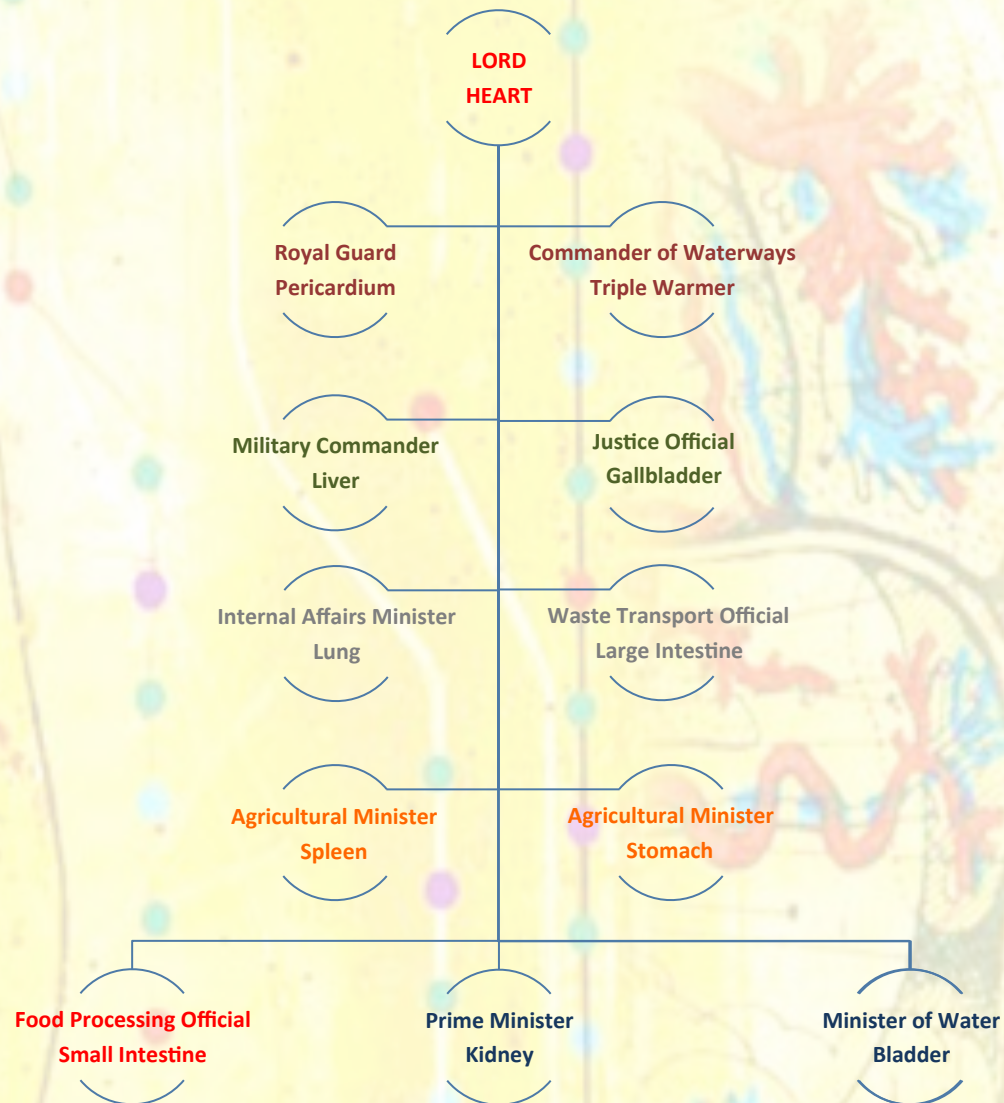
# Heart the Supreme Lord

- Neijing calls Heart the Supreme Lord of the state or Xin
  - As such, each of the other organs are identified as ministers of state, the body then functions paralleling the feudal administration of the nation
  - As a result, most of the action and treatment in body goes through the ministers to maintain the realm of the Lord





# Feudal Distribution of Power Chinese Medicine



# The Heart - Xin

- Responsible for the pulsing circulation of blood felt in arteries
  - Other Chinese organs also very important with regard to Blood
    - Liver - Stores Blood and responsible for the Smooth flow of blood
    - Spleen forms blood
    - Lung controls Qi which is essential for blood movement
    - Kidney provides essence or Jing, which is also essential in formation of blood and helps balance Shen, which resides in blood
- Overall constitution of body depends on strong heart
  - Blood quantity and movement essential for health
- Functions
  - Governs Blood (Xue)
  - Houses Mind
  - Controls Blood Vessels
  - Manifests in Complexion
  - Opens into tongue
  - Controls Sweat (autonomic nervous system)

D/M meridians

EOV



# The Blood & Blood Vessels

- The Blood
  - Heart is where blood is made through the transformation of the Gu Qi from Spleen and Kidney Jing
  - More yin or substantial than Qi but action in body dependent on the agency of Nutritive or Ying Qi
  - Houses the Mind or Shen
- The Blood Vessels
  - Supple strong pulse relates to strong Heart
  - Because the 5 yin organs can be sensed at the pulse, again relates to concept that Heart is Ruler of the other organs

# The Shen (Mind or Spirit)

- The Mind or Intellectual function is controlled by Heart
  - Memory
  - Consciousness
  - Thoughts
  - Dreams
- The Emotions broadly related to Heart but all organs play a role

My crown is in my heart,  
not on my head; not decked  
with diamonds and Indian  
stones, nor to be seen: my  
crown is called content, a  
crown it is that seldom kings  
enjoy.

  - Shakespeare



# Shen and Natural Law

- Paul Unschuld (Translator of the Huang Di Nei Jing): Points out that during the Han Dynasty, the Ling Shu and Su Wen as a canon of medicine was a controversial departure from the cultural shamanism of the era where disease, illness and death were controlled by external deities, spirits, demons and ancestors
  - Demons internalized and become part of a secular natural law
  - Human wellness was no longer at the mercy of the Gods or religion but could be cultivated with correct or true (Zhen) living

# Shen and Natural Law

- Redefinition of terms
  - Shen historically had been a general term to denote all spiritual beings that decided human fates
  - Rather than make a radical departure from this view of the fates, the Ling shu provides a new interpretation: The spirit or Shen is now a vital force in the body itself
  - Each organ was assigned a spirit that an individual could nurture and harmonize with good living – Death is the result of excessive use of the organ resources leading to the Spirit escaping and harm then ensues
    - Righteous (Zhen) living leads to health
    - Deviation from the righteous path – Xie (evil) leads to illness



# The 5 Spirits

- In the Ling Shu, the Yellow Emperor wants to know why disharmony occurs in the body...Is it a punishment from heaven or a mistake by the person?

*The heaven is one in virtue. The earth is one in qi. The virtue streams down and the qi reaches up to it, subsequently there is life. Therefore, the coming of life is called jing. Both jing beat [meet] together; this is called **shen**. Following shen, going and returning, this is **hun**. Paralleling jing, going out and coming in, this is called **po**.*

Spirit	Yin Organ	Western Concept	Pathology
Shen	Heart	Mind	Mania
Hun	Liver	Ethereal Soul	Anger
Po	Lung	Corporal Soul	Grief
Yi	Spleen	Thought	Anxiety, Worry
Zhi	Kidney	Will	Shock, Fright

# Shen

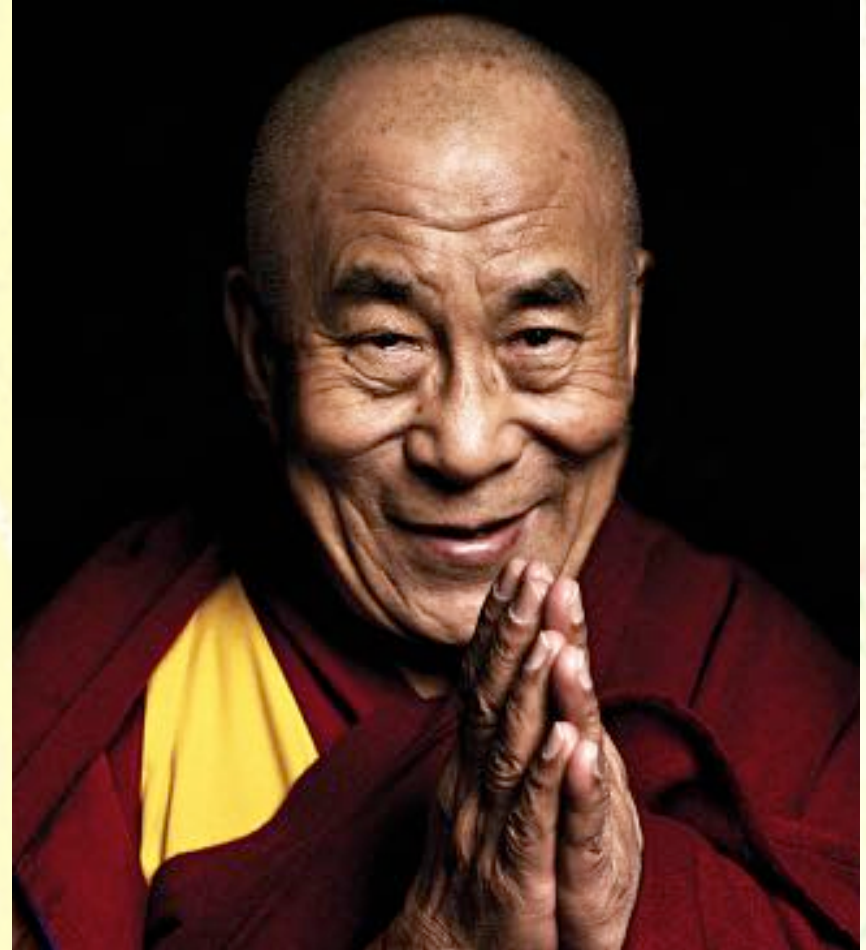
- Shen is the more yang aspect of Blood which is more yin
  - Inexorably connected to Blood
  - When Blood is harmonized the mind has a residence
    - Implies that diseases of Heart and blood can alter balance of mind
  - When Mind is harmonized blood flows smoothly
    - Implies mental state affects blood
      - Anemia leads to fatigue and depression
      - Anxiety and stress affect blood flow
        - » Palpitations
- Extreme Shen disturbance
  - Mania





# The Complexion

- Radiance and sense of calm seen in face when Shen Balanced
  - The Shen can be seen in the complexion



# The Tongue

- Ends at the tongue
  - Tip represents heart region of tongue
  - Relates to speech as Shen disturbance affects speech
    - Stuttering
    - Aphasia





# TCM Heart Pathology

## Yang Deficiency Patterns

Pattern	Signs	Pulse	Tongue
Deficient Heart Qi	Pale face, SOB, sweating and palpitations	Weak and intermittent	Pale
Deficient Heart Yang	Similar to Def Qi but more severe symptoms with aversion to Cold	Weak and slow, intermittent	Pale and moist
Stagnant Heart Blood	Stabbing pain in heart, purplish face, cyanotic, palpitations	Choppy and wiry	Purplish
Cold Phlegm disturbing Heart	Depression with constant muttering to self, blank expression	Slippery and slow	Greasy white coat

# TCM Heart Pathology

## Yin Deficiency Patterns

Pattern	Signs	Pulse	Tongue
Deficient Heart Yin	Malar flush, night sweats, agitation, insomnia, palpitations	Thin and rapid	Red, dry, no coat
Blazing Heart Fire (collapse of yin)	Whole face red, agitated, hematuria	Full and rapid	Red, yellow coat
Deficient Heart Blood	Dull pale face with insomnia, anxiety, palpitations	Thin	Pale
Phlegm Fire disturbing Heart	Violent mania, ravings, laughing and crying without reason	Slippery and rapid	Red, greasy yellow coat



# Main TCM Treatment Concepts

- Deficient Heart Qi and Heart Yang
  - Often found in Coronary Artery Disease, Congestive Heart Failure, Arrhythmias
    - PC 6 (Source point for PC ) to strengthen Heart Qi
      - In this case use pericardium rather than Heart points as PC is heart protector
    - HT 5 (Luo Connecting Point) to strengthen Yang bring energy in from Yang Pair (Small Intestine)
    - BL 15 (Heart shu point) again to calm and invigorate Shen
    - CV 6 (Qihai – Sea of Qi) to strengthen Qi in body (Heart)
      - Could use CV 4 instead (SI Mu point and also considered a key point to strengthen Qi)
    - CV 17 (Pericardium Mu point)
      - In Japanese approach only used as diagnostic reflex – TOO Painful to needle in most cases

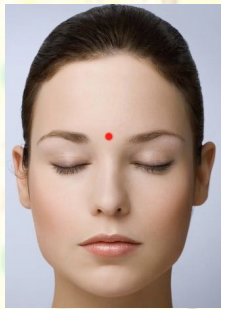
# Main TCM Treatment Concepts

- Stagnant Heart Blood
  - Stagnation implies Pain and with the Heart that means Angina Pectoris
    - PC 4 (Xi Cleft point – used for acute pain affecting organ)
      - In this case use pericardium rather than Heart points as PC is heart protector
    - BL 17 (Diaphragm Shu, Meeting point of Blood, at T7 level)
      - Chinese believe blood made at diaphragm as Gu Qi and Heart meet
      - Helps blood circulation
    - CV 17 (Pericardium Mu point)
      - In Japanese approach only used as diagnostic reflex – TOO Painful to needle in most cases



# Main TCM Treatment Concepts

- Heart Blood Deficiency
  - In addition to lack of blood, the Shen is disturbed as well (Shen housed in blood), leads to insomnia, agitation
    - Yintang to calm shen (extra point on face)
    - HT 7 (Shenmen = Spirit Gate, Source Point and Earth point on Heart meridian) to calm Shen, strengthen Heart
    - BL 15 (Heart shu point) again to calm and invigorate Shen and Blood circulation
    - BL 17 to create more blood
    - SP 6 to strengthen Spleen to help with Blood creation
    - BL 20 (Spleen shu point) to invigorate Spleen to help blood creation



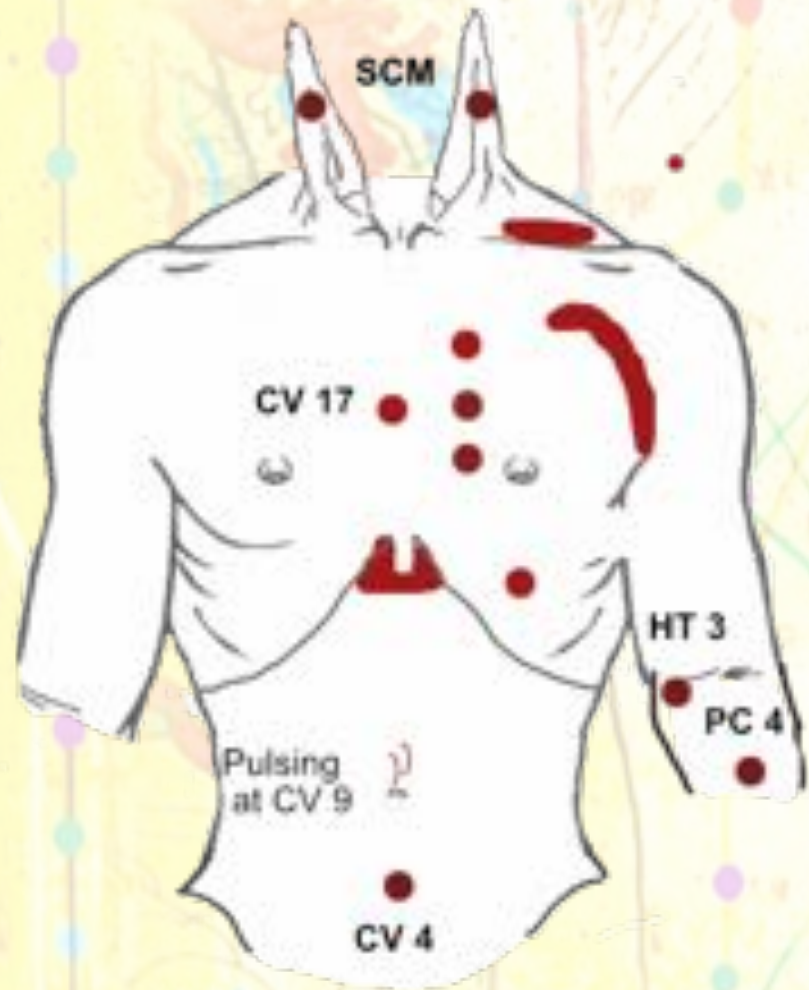
# Main TCM Treatment Concepts

- Deficient Heart Yin
  - Signs of false heat with night sweats, flushed face and disturbed shen with insomnia and anxiety
    - HT 8 (Fire point) regulates fire in Heart
    - BL 15 (Heart Shu point) Strengthen Heart
    - KD 3 (Kidney source point) strengthen Kidney to nourish Heart Yin
    - BL 23 (Kidney Mu point) strengthen Kidney to nourish Heart Yin



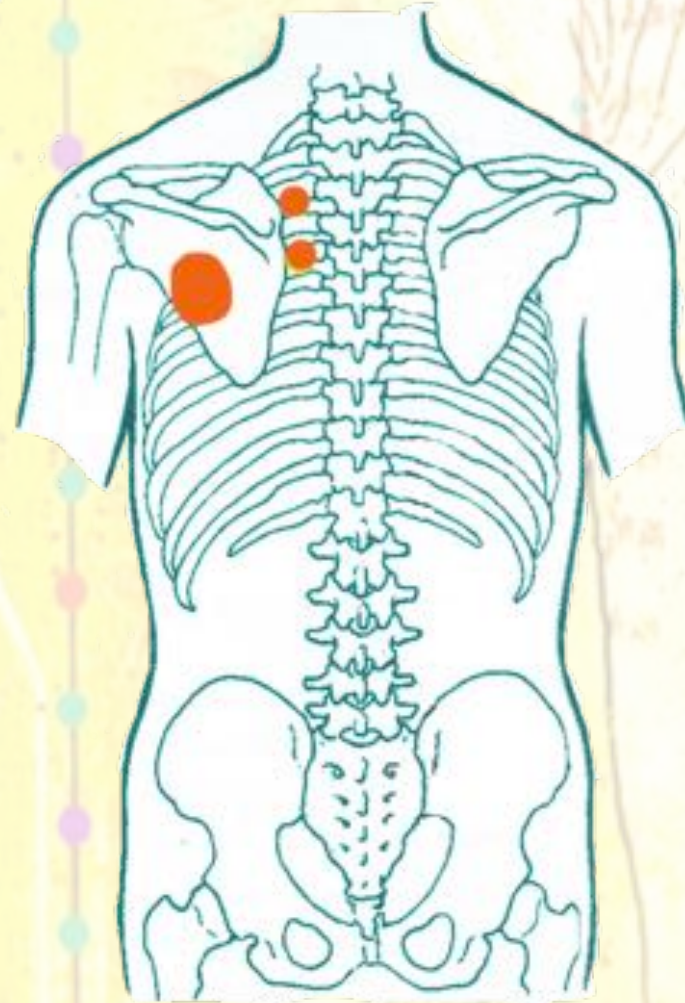
# Japanese Approach Cardiac Reflexes

- Using a Japanese approach the main diagnostic reflex zones are clearly found as areas of tightness and/or painful upon palpation
  - CV 17 (PC Mu point)
  - Pressure pain that extends into chest wall around Heart on left side
  - Pressure pain and tightness in the supraclavicular fossa (Region of ST 12)
  - The SCM muscles may be tight and painful as well reflecting an autonomic disturbance



# Japanese Approach Cardiac Reflexes

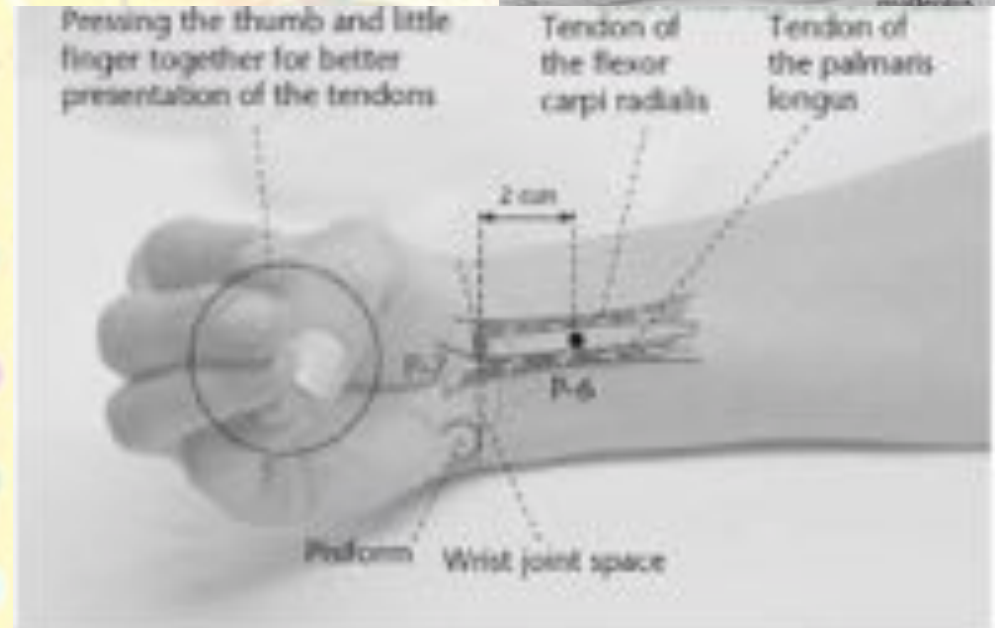
- Key reflexes on back
  - SI 11 on Left
    - Cardiac patients develop a Cardiac lump in region of infraspinatus muscle
  - Left Heart Shu (T5 level)
    - In region of Rhomboids
  - Left Lung Shu (T3 level)
    - Rhomboids





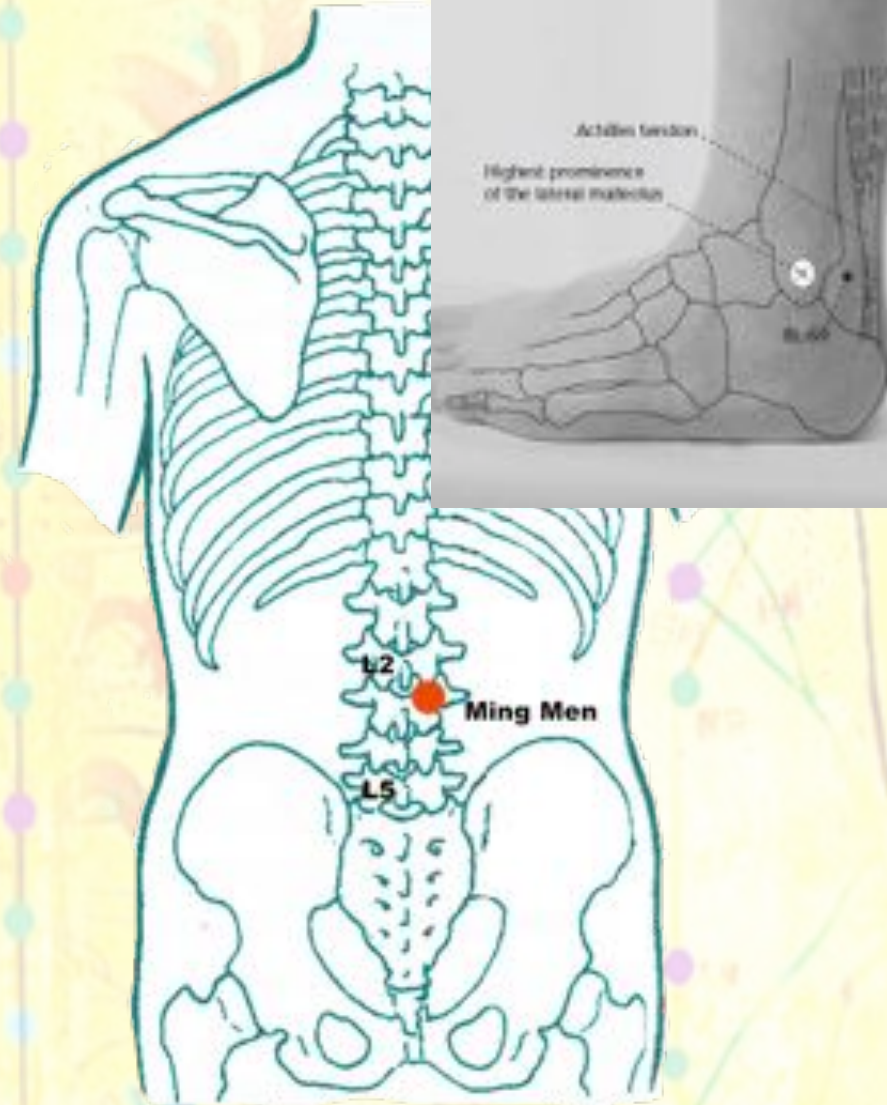
# Japanese Approach Cardiac Reflexes

- Basic Treatment to relieve pressure pain on CV 17 and on chest wall
  - Bilateral SP 6 (Builds blood, triple yin meeting point of leg so also helps KD and LV function)
  - Bilateral PC 6 (Reduces pressure on CV 17)(Many more details and variations to come in future lectures)



# Japanese Approach Cardiac Reflexes

- Basic Treatment to relieve pressure pain on SI 11 and Cardiac Shu region on left
  - BL 60 (fire point on water meridian) reduces pressure pain on SI 11
  - Right Huato Jiaji point at L23 (Kidney Ming Men) to relieve pressure pain on Heart Shu region
    - By strengthening Ming Men Kidney can have stronger cooling effect on Heart Fire





# Japanese Treatment Concepts

- Spleen and Pericardium are the focus of treatment
- Pericardium
  - Pericardium is Heart Protector and specifically relieves pressure on CV 17 (PC Mu)
  - Pericardium has a strong influence on issues in the anterior chest
- Spleen as the provider of Gu Qi to the Heart to form Blood plays an important role in Cardiac issues
  - Spleen has a strong influence on Shen through the interaction with Yi (Thoughts, Anxiety) and one's overall emotional state or Shen

*The shao yin vessel of the heart; the heart is the great controller of the 4 yin and 6 yang organs. This is the place where jing and shen stay....Evil cannot be accepted here. When evil is accepted, this means the heart will be injured, the shen will leave and this means death. Therefore, every evil [that would come to the heart] will stay at the wrapping luo of the heart. LS 71:494*

# Japanese Treatment Concepts: Hara Diagnosis

- The influence of Kidney, Lung and Liver function and its effect on the Heart is diagnosed by Hara palpation and treated before Spleen/Pericardium Treatments
- Potential Supportive Tx's
  - Kidney ➔ Adrenal Tx
  - Lung ➔ Immune Tx
  - Liver ➔ Liver Tx & Oketsu
  - Spleen ➔ Supports PC Tx
- Kidney Heart relationship
  - Cooling effect of Water element (Kidney) on Heart Fire
- Lung Heart relationship
  - Lung is source of Zong and Jing Qi which is critical in Blood formation and Blood movement respectively
- Liver Lung relationship
  - Liver is the mother of heart (Wood - Fire relationship) and also stores blood and is the minister that ensures the smooth flow of blood throughout the body
  - Stagnation of Blood relates to Liver function



# Yang Couple: Small Intestine

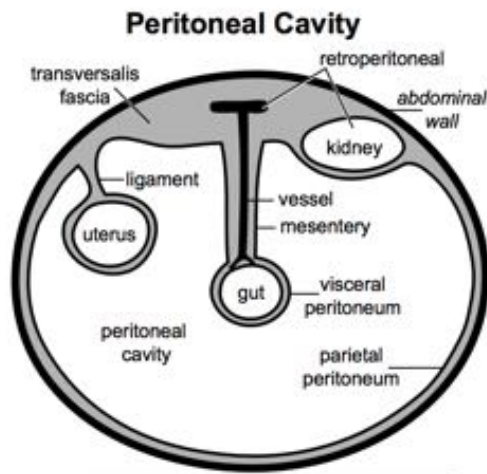
- Small Intestine from a TCM point of view has a remote relationship to Heart
  - Very different than the close interconnection between Ying/Yang couple, Spleen and Stomach, in function
  - However, from a Japanese point of view (interpretation of Han Dynasty Texts), there is a strong connection of SI to the mesenteric fascia which embryologically connects via the extracellular matrix the SI to the heart and lungs

- In the Zhen Jiu Yi Jing (282 AD) the Small Intestine is described

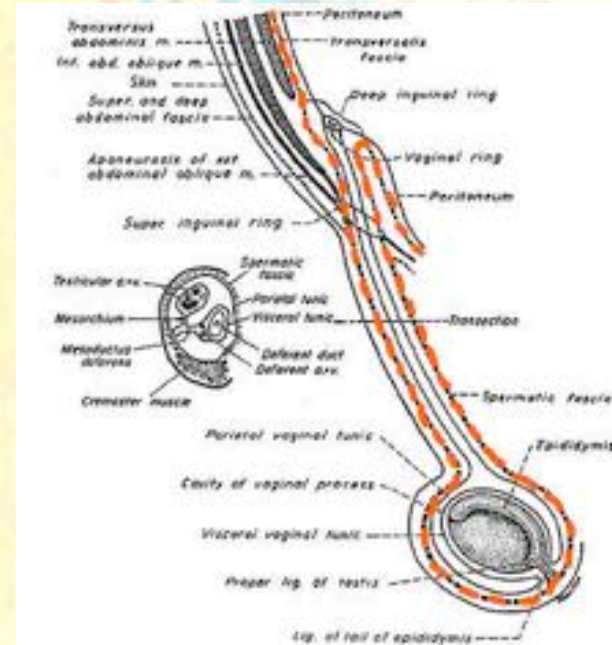
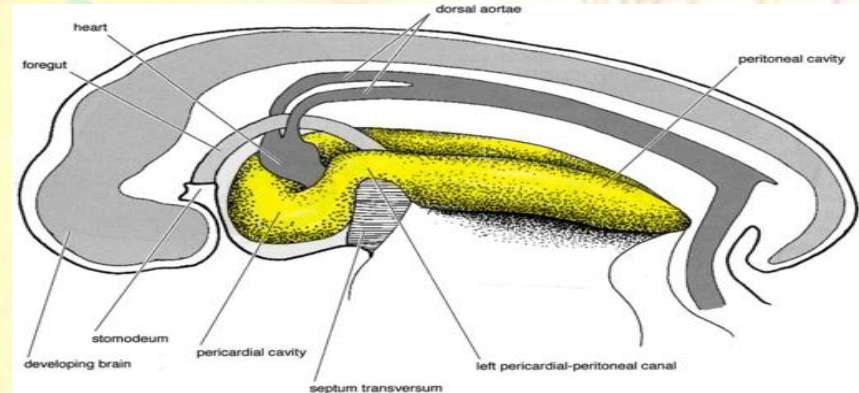
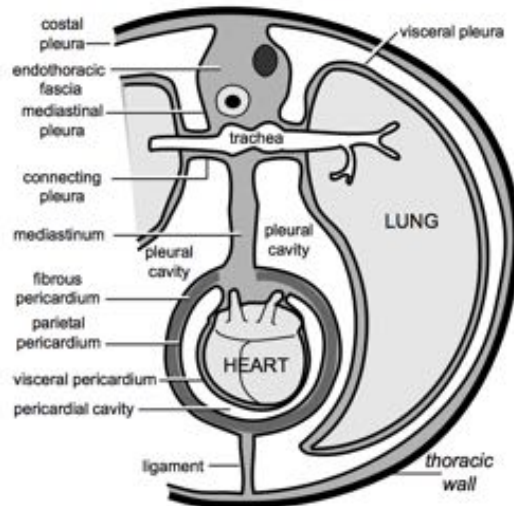
*The small intestine is related to the supporter of the testicles, it belongs to the spine, it passes through the liver and lungs, spirally wraps the supporter of the heart, rises up and harmonizes the intestines and stomach. It smokes (fumes) the liver and lungs and then disperses at huang. It knots itself at the umbilicus. Therefore, using the huang source, disperse it.*

# Mesentery, Peritoneum & Pericardial Cavity

## Derived from Embryonic Coelom



### Pleural (two) & Pericardial Cavities





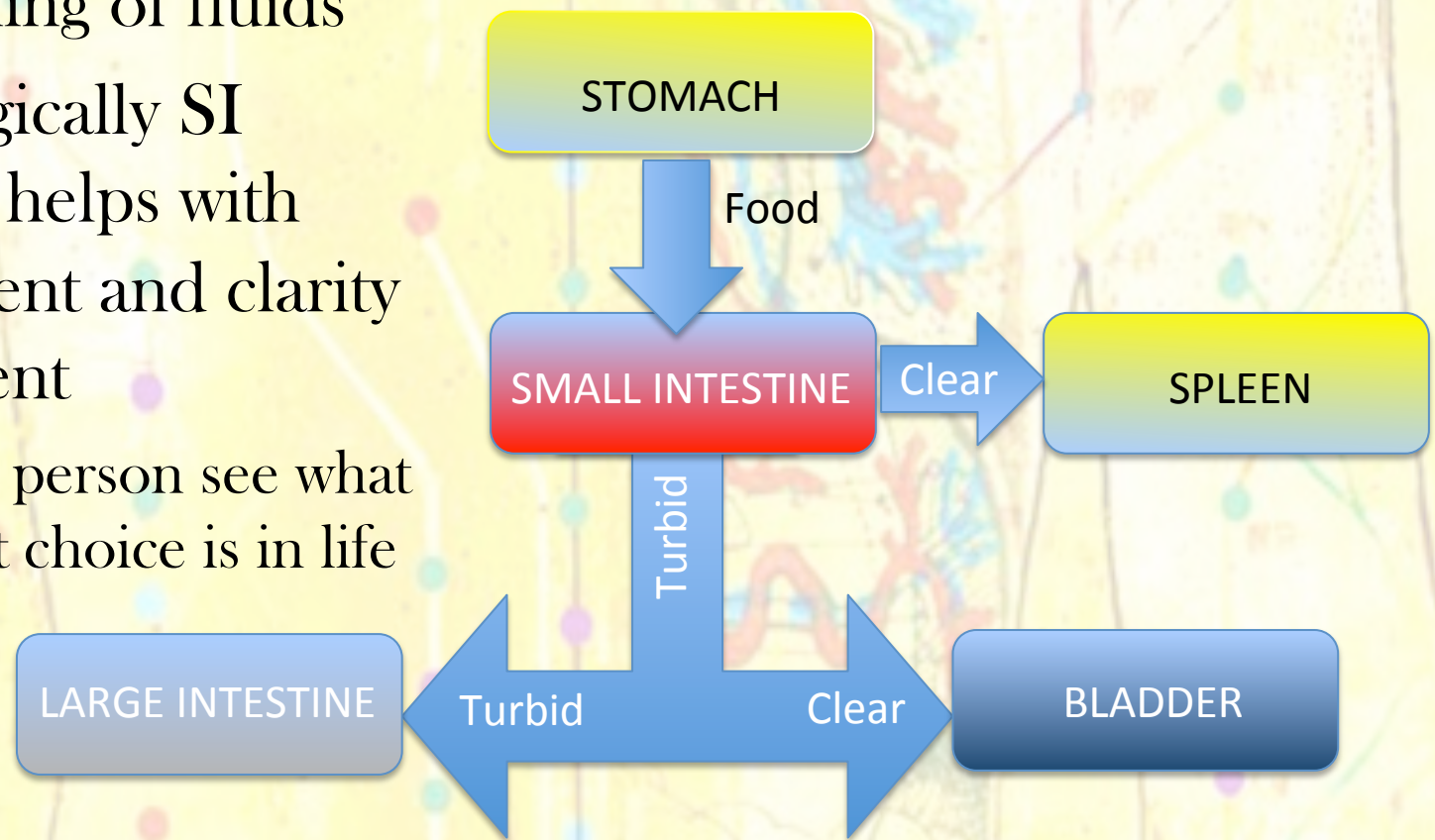
# Small Intestine and Huang

- Huang is the greasy membrane that spirally wraps (luo) the small intestine
- Dr. Manaka theorized that the Mu points on front of body relate to associated organ through fascial connections
  - If Mu points not responsive to palpation, stretch fascia first then they will react

Acupoint	Name	Comments
CV 15	Gao source	Luo pt of CV
KD 16	Huangshu	
CV 4	Guanyuan	Gate of Source and SI Mu pt
BL 43	Gaohuang	
BL 51	Huangmen	
BL 53	Baohuang	
BL 26	Guanyuanshu	Gate of Source Shu

# Small Intestine Function in TCM

- Controls receiving and transforming of fluids
- Psychologically SI therefore helps with discernment and clarity of judgment
  - Helps a person see what the right choice is in life





# Take Home Message

- Although Heart and Shen influence all organ function in the body, treatment focuses on Heart Protector (Pericardium) and other organs (Ministers of the Monarch) who influence Heart
- CV 17 (Pericardium Mu point) is the center of the diagnostic reflexes that we use to determine Shen disturbance
  - True cardiac issues found by palpating around the chest on left side (the heart) and the supraclavicular fossa
  - On back, diagnostic findings focus at SI 11 and Heart and Lung Shu region (BL 15 and BL 13)

# Key Points

- Diagnostic Points
  - CV 17 (Pericardium Mu)
  - ST 12 (Supraclavicular fossa)
  - SI 11 (Cardiac Lump)
  - BL 15 (Heart Shu)
  - BL 13 (Lung Shu)
- Treatment Points
  - SP 6
  - PC 6
  - BL 60
  - Mingmen (Right Huato Jiaji point at L23)