Zang Fu Pattern Identification

脏腑辩证

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What is Zang Fu Pattern Identification?

- A method is applied to analyses and generalize signs and symptoms of disease according to the physiological function and pathological characteristics of the zang Fu organs in order to infer etiopathology, to spot the location and judge the nature of pathological changes, as well as the state of body vital qi in conflict with pathogenic factors.

- It is the most fundamental method in TCM diagnosis and the foundation for clinical analysis and differentiation of every disease.
Relationship with other identification methods

Eight principle pattern ID, etiology pattern ID, and qi, blood and body fluid pattern ID are the basis for zang fu pattern ID.
Relationship between Zang Fu PI and Other PI

- Location
- Nature
- Pathogens
- Properties
- Zang Fu Pattern ID
- Eight Principle Pattern ID
- Etiology Pattern
- Qi, Blood, Body Fluid Pattern ID

Properties
Pathogens
Nature
Location

Etiology Pattern
Zang Fu Pattern ID
Eight Principle Pattern ID
Qi, Blood, Body Fluid Pattern ID
Pattern Identification Procedure

- **Nature**: Use Eight Principle as guide to identify excess/deficiency, heat/cold
- **Location**: Base on Zang Fu physiological function and pathological characteristics
- **Properties**: For deficiency pattern, identify Qi, blood and Body Fluid
- **Pathogens**: For excess pattern, identify the pathogen(s)
Methods

When identify pattern, the following aspects should be taken into consideration:

► Nature, character, and pathological changes of the Zang Fu organ and it’s related meridian.
► The relationship with other organs and tissues.
► The relationship with other Zang Fu organs.

Through the three aspects above, we can find out Zang Fu organs pathological changes to provide evidences for pattern identification.
Symptoms and signs

Eight Principles Pattern Identification

Exterior pattern

Interior pattern

Identify Zang Fu organs

Identify excess or deficiency

Identify heat or cold

deficiency

Identify qi, blood, yin or yang

Excess

Identify etiological factors
Heart and Small Intestine Pattern
Introduction

► Location

- In middle of the chest, between two lung lobes, above diaphragm, shape looks like upset down lotus blossom, and outside guard by pericardium.

► Physiological function

- Govern blood and controls blood vessels
  - Promote blood circulation: motive force
  - Generate blood
  - Keep blood vessels smooth
- House spirit
Heart Dominate Blood and vessels

- Heart dominate blood and vessels
  - Dominates blood
  - Manufactures blood
  - Promotes blood circulation
    - Water and grain essences sends to Heart and Lung, under the Heart fire transform into red to form blood
    - Contraction of the Heart is the motive force for blood circulation
  - Dominates vessels
    - Heart qi promotes Heart and vessels contraction, ensure elastic and smooth
Heart housing the Shen

- Dominates blood
- Receive external stimuli

Nourishing Shen, maintain mental and physical activities

- Heart → Shen/sprite → Joy
- Lung → Po/Corporeal soul → Sadness/grief
- Spleen → Yi/intention → Worry/anxiousness
- Liver → Hun/ethereal soul → Anger
- Kidney → Zhi/Will → Fear/Frighten
Physiological characteristics

- Yang organs, belongs to fire, dominate yang qi
  - Easy attacked by heat/fire
- Related with summer

Physiological Relationship with others

<table>
<thead>
<tr>
<th>Heart</th>
<th>Relation</th>
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</thead>
<tbody>
<tr>
<td>Internally-externally connection</td>
<td>Small Intestine</td>
</tr>
<tr>
<td>Open orifice</td>
<td>Tongue</td>
</tr>
<tr>
<td>Manifestation on</td>
<td>Face</td>
</tr>
<tr>
<td>Related fluids</td>
<td>Sweating</td>
</tr>
<tr>
<td>Related fire</td>
<td>Monarch fire</td>
</tr>
<tr>
<td>Related emotion</td>
<td>Joy</td>
</tr>
</tbody>
</table>
# Physiology and pathogenesis of the heart

<table>
<thead>
<tr>
<th>Physiology</th>
<th>Pathogenesis</th>
<th>Common symptoms and signs</th>
</tr>
</thead>
<tbody>
<tr>
<td>Governs blood and controls the</td>
<td>Qi and blood circulation obstructed</td>
<td>palpitation, SOB, chest distress, oppression and pain, irregular pulse</td>
</tr>
<tr>
<td>blood vessels</td>
<td>Pathogenic heat disturbs blood</td>
<td>Vomit blood, nose bleeding, urine with blood, bruise</td>
</tr>
<tr>
<td></td>
<td>Blood insufficiency not able to nourishes the</td>
<td>Palpation, dizziness, blurry vision</td>
</tr>
<tr>
<td></td>
<td>Heart</td>
<td></td>
</tr>
<tr>
<td>Houses the mind</td>
<td>Blood insufficient not able to nourishes mind</td>
<td>Insomnia, dream disturbed sleep, poor memory</td>
</tr>
<tr>
<td></td>
<td>Heat flairs up disturbs mind</td>
<td>Irritability, manic, delirium, coma</td>
</tr>
<tr>
<td>Opens into tongue</td>
<td>Excess heat</td>
<td>Red prickles on tongue tip, or ulcers</td>
</tr>
<tr>
<td></td>
<td>Blood stagnation</td>
<td>Purple or dusky (pale purple) tongue, or dark spots on tongue</td>
</tr>
<tr>
<td></td>
<td>Pathogens obstructed tongue channels and</td>
<td>Stiffness tongue, flaccid tongue, difficult speech, or not able speech</td>
</tr>
<tr>
<td></td>
<td>collaterals</td>
<td></td>
</tr>
<tr>
<td>Physiology</td>
<td>Pathogenesis</td>
<td>Symptoms and signs</td>
</tr>
<tr>
<td>-------------------------------------</td>
<td>---------------------------------------------------</td>
<td>---------------------------------------------</td>
</tr>
<tr>
<td>Manifests in the complexion</td>
<td>Qi, blood, or yang deficiency</td>
<td>Pale face</td>
</tr>
<tr>
<td></td>
<td>Blood stagnation</td>
<td>Dark or purple complexion</td>
</tr>
<tr>
<td>Relate with Small Intestine</td>
<td>Heart fire transform down to the small intestine</td>
<td>Frequent, scanty and dark yellow urine with painful and burning sensation</td>
</tr>
</tbody>
</table>

**Common (key) symptoms for Heart patterns**

- palpitation
- Sleep disorder/insomnia
- Shen disorder
- Chest distress (oppression) or pain
- other symptoms: canker sores, chest pain, poor memory, tongue ulcers, irregular pulse, etc.
**Palpitation**

- *Fright palpitation*: It means the sensation of the heart beats that patients feels by themselves, it cause by increase the heart beat, or increase the heart construction or irregular heart heats.

- *Continuous palpitation*: is severe throbbing of the heart, which is often felt from the chest down to the umbilicus. Prolonged duration of this condition is severe and may require medical attention.
**Etiology and pathogenesis of palpitation**

- Emotional stress, exopathogens
- Blood stasis
- Water
- Phlegm
- Qi, blood, yin and yang deficiency

- Improper diet, Chronic illness, constitution, aging

- Heart

- Shen disturbed
- Shen restlessness, irregular pulse
- Lack of motive force

- Palpitations
Sleeping disorder: which include insomnia and Sleepiness (Somnolence)

Insomnia describes a variety of different symptoms associated with sleep disturbance, includes

- difficulty falling asleep after retiring
- early awakening
- intermittent waking through the period of attempted sleep, and even inability to sleep all the night.
- Restlessness at night
- Dream disturbed sleep
Etiology and pathogenesis of insomnia

Emotional stress, pathogenic heat

-hear
-heat
-phlegm

Qi, blood, yin and yang deficiency

Chronic illness, aging, improper diet

- Shen disturbed
- Shen couldn’t anchor at night
- Shen lost nourishment

Insomnia
**Shen disorder**: a condition due to consciousness is obscured or lost with abnormal clinical behaviors. This condition is usually found in one of the following patterns.

- Irritability and restlessness (煩躁 fán zào)
- Restless organ disorder (臟躁 zàng zào)
- Hysteria (百合病 bâi hé bìng)
- Yin madness (癲 diān)
- Yang madness (狂 kuáng)
- Epilepsy (癇 xián)
Etiology and Pathogenesis of Shen disorder

- Emotional stress, pathogenic heat
- Heat, phlegm
- Qi, blood, yin and yang deficiency
- Chronic illness, aging

Heart

- Shen disturbed
- Shen unsette or couldn’t function
- Shen lost nourishment

Shen unsettled
**Chest Distress or Pain:** a sensation of pain, discomfort and unpleasant felling, or tightness and stifling sensation in the chest area
Etiology and Pathogenesis of Chest distress or pain

- Emotional stress, pathogenic cold, trauma injury
- Qi phlegm
- Blood stasis
- Qi deficiency
- Chronic illness, aging, improper diet, constitution

Heart

- Stagnation
- Chest Qi obstructed
- Lack of movement

Chest distress or pain
Common etiological factors for Heart patterns

- Congenital insufficiency
- Chronic illness with improper care
- Excessive anxiety and worry
- Exopathogenic heat or cold attacking
- Improper diet creating phlegm or lack of nutrition
Heart Patterns

Deficient pattern

Heart qi deficiency
Heart blood deficiency
Heart yin deficiency
Heart yang deficiency
  • Heart yang collapse

Excess pattern

Heart fire flaming upward
Phlegm confounding the heart orifice
Phlegm fire harassing the Heart
Heart vessels obstructed
  • Phlegm
  • Qi obstructed
  • Blood stasis
  • Excess cold
Heart Qi deficiency (心气虚证)

► **Definition:** a syndrome result from lack of motive force, cause blood circulation slow down, lead heart loss nourishment.

► **Symptoms and signs:** palpitation, oppression in the chest, shortness of breath worse with exertion, listlessness, fatigue, pale face, spontaneous sweating, a pale tongue with white coating, a weak pulse, or a knotted, intermittent pulse

- **Key Points:** palpitation, chest oppression plus qi deficiency signs and symptoms
Etiology and Pathogenesis

- **Heart Qi deficiency**
  - Congenital weakness
  - Chronic illness
  - Improper diet, aging

- **Spontaneous sweating**
  - Qi deficiency failed to consolidate the body surface

- **Palpitation**
  - Failed to nourishes Spirit

- **Etiology and Pathogenesis**
  - Lack of motive force, failure to promote and generate blood
  - Palpitation, pale face, pale tongue, chest distress, short of breath, irregular and weak pulse
Heart Yang Deficiency Pattern (心阳虚证)

► **Definition:** A pattern caused by declination of the Heart yang, decreased motive force and warmth function, result internal deficient cold.

► **Symptoms and signs:** Palpitation, oppression and distress or pain in the chest, intolerance of cold, cold limbs, SOB, fatigue, listlessness, bright-pale face, spontaneous sweating, a pale flabby tongue with white slippery coating, a minute, or knotted, intermittent pulse, or a deep, slow and weak pulse. There are may edema in ankle and feet.
**Key points:** Palpitation, oppression and distress or pain in the chest, plus yang deficiency pattern

**Etiology and Pathogenesis**

- **Yang deficiency**
  - Fails to warm
  - Cold limbs, intolerance of cold
  - Fails to transform water
  - Flabby tongue

- **Qi deficiency**
  - Lack of motive force
  - Palpitation, chest distress, fatigue, spontaneous sweating, irregular and weak pulse

- **Heart yang deficiency**

- **Congenital weakness**

- **Chronic illness**

- **Improper diet, aging**
Heart Yang Collapse (心阳暴脱证)

► **Definition:** a critical condition due to Heart yang extremely exhausted, result yang collapse

► **Symptoms and Signs:** Developed from heart yang deficiency, suddenly profuse cold sweating (pearl sweating), cold extremities, feeble and sallow breathing, pale complexion, or severe pain in the chest area, cyanosis of lips, scatter or minute pulse. In severe case, patient lost consciousness or in coma

► **Key points:** Suddenly severe palpitation, cold oil-like sweating, combine with Heart yang deficiency and yang collapse symptoms and signs
Etiology and pathogenesis

Heart Yang Collapse

- Heart Yang Deficiency
- Pathogenic cold attack
- Phlegm obstructs Heart Orifice

Heart Yang Collapse

- Yang qi failure
  - Failure to consolidate surface
  - Failure to warm
  - Zong qi leading, unable assist Lung

- Blood vessels obstructed due to yang qi failure

- Heart loses nourishment, *shen* not able to stay
  - Yang failure to push outward

- Cold oily sweating
- Cold body and limbs
- Feeble breath
- Pale face, bluish purple lips
- Chest pain
- Stupor or coma
- Faint or minute pulse
## Heart qi deficiency, heart yang deficiency and heart yang collapse pattern

<table>
<thead>
<tr>
<th>Pattern</th>
<th>Etiology</th>
<th>Symptom and signs</th>
</tr>
</thead>
<tbody>
<tr>
<td>Heart qi deficiency</td>
<td>Chronic illness, aging, weak constitution</td>
<td>Common: Qi deficiency signs and symptoms, weak or feeble pulse</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Different: Deficiency cold symptoms: cold limbs, intolerance of cold, chest pain, bright pale face, minute pulse</td>
</tr>
<tr>
<td>Heart yang deficiency</td>
<td>Developed from heart qi deficiency, but more severe</td>
<td>Common: Palpitation, oppression, SOB, worse with exertion, spontaneous sweating</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Different: Deficiency cold symptoms: cold limbs, intolerance of cold, chest pain, bright pale face, minute pulse</td>
</tr>
<tr>
<td>Heart yang collapse</td>
<td>Develop from heart qi deficiency or heart yang deficiency, or phlegm obstruct heart</td>
<td>Common: Yang collapse symptoms: sudden profuse cold sweating, feeble and sallow breathing, cyanosis lips, or coma. Minute or scatter pulse</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Different: Deficiency cold symptoms: cold limbs, intolerance of cold, chest pain, bright pale face, minute pulse</td>
</tr>
</tbody>
</table>
Heart blood deficiency pattern (心血虚证)

Definition: it refers to the syndrome with occurs when blood insufficient failed to nourish heart

Symptoms and signs: palpitation, insomnia, dream disturbed sleeping, dizziness, blurry vision, poor memory, dull pale complexion, pale lips and tongue, feeble and thready pulse.

**Key points:** palpitation, insomnia, poor memory plus blood deficiency pattern
Etiology and pathogenesis

- Palpitation, insomnia, dream disturbed sleep
- Shen lost the nourishment, not able to settle and ache
- Not able to fulfill the vessels
- Thin and deficient pulse
- Dizziness, poor memory, pale complexion, tongue and lips. Thready pulse

- Bleeding
- Chronic illness
- Emotion stress

Heart blood deficiency

Failed to nourishes face and brain
Heart yin deficiency pattern (心阴虚证)

- **Definition:** A pattern occurs when the heart yin is too deficient to nourish the heart, leading deficient fire disturbs inside.

- **Symptoms and signs:** Palpitation, insomnia, dream disturbs sleeping, feverish sensation in the five center, irritability, night sweating, hectic cheek, fever in the afternoon or evening, dry throat, red tongue with little coating, a thready and rapid pulse.

*Key points:* Palpitation, insomnia, plus yin deficiency.
Etiology and pathogenesis

- **Febrile disease**

- **Chronic illness**

- **Emotion stress**

**Heart yin deficiency**

- Palpitation, insomnia, dream disturbed sleep
- Shen lost the nourishment, and disturb by heat, not able to settle and ache
- Deficient heat evaporates the body fluids out at night
- Night sweating
- Yang relative excess, generate deficiency heat
- Feverish sensation in the afternoon or evening, hot in the chest, palm and sole, hectic fever, rapid pulse
# Heart blood deficiency vs. blood yin deficiency

<table>
<thead>
<tr>
<th></th>
<th>Heart blood deficiency</th>
<th>Heart yin deficiency</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Etiology</strong></td>
<td>Lack of production: spleen deficiency or chronic illness</td>
<td>Emotional stress, or later stage of febrile disease, or kidney yin and liver yin deficiency relate to heart</td>
</tr>
<tr>
<td></td>
<td>Over consume or bleeding</td>
<td></td>
</tr>
<tr>
<td><strong>Pathogenesis</strong></td>
<td>Blood deficient failed to nourish heart</td>
<td>Yin deficiency lead deficient heat disturbed inside</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td><strong>Symptoms</strong></td>
<td>Palpitation, insomnia, dream disturbs sleeping</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Blood deficiency symptoms: pale, dizziness, blurry vision,</td>
<td>Yin deficiency with heat symptoms: tidal fever, heat</td>
</tr>
<tr>
<td></td>
<td>poor memory, thready and weak pulse</td>
<td>sensation in five center, hectic cheek, night sweating,</td>
</tr>
<tr>
<td></td>
<td></td>
<td>red tongue with little coating, thready and rapid pulse</td>
</tr>
</tbody>
</table>
Depressed heart qi pattern (Deng, English)

- Heart palpitation, heart vexation, insomnia, unregulated joy and anger, sorrow for no reason, fear of light and preference for dim places, chest oppression, frequent yawning and stretching, a pale tongue body and a deep and weak or deep and rough pulse

“Zang Zao” Syndrome
Other possible deficient type pattern

► **Heart qi and blood deficiency**: palpitation, SOB, spontaneous sweating, oppression in chest, fatigue, listless, pale complexion, insomnia, poor memory, pale tongue, weak and thready pulse

► **Heart qi and yin deficiency**: palpitation, SOB, uneasy (restless), insomnia due to vexation, easy sweating, feverish sensation in palm and sole, dry mouth, red tongue tip, little coating, or peeling coating, thready and rapid or abrupt pulse
Heart Fire Blazing (心火亢盛证)

► **Definition:** refers to the syndrome of excessive fire in the heart

► **Symptoms and signs:** Vexation and hot sensation in chest, irritability, agitated, insomnia, red face, thirst and desire for drinking, yellow urine, dry stool, deep red tongue tip, or tongue ulcers, rapid and forceful pulse. Or manic behavior, delirium, or even hematemesis, nose bleeding.

► **Key points:** insomnia, irritability, vexation, manic delirium, red tongue tip or tongue ulcers
Etiology and Pathogenesis

Emotion
- stress

Pathogenic heat
- Heart fire flaming up

Improper diet
- Fire flaming up disturbed spirit

Insomnia, manic, delirium, irritability

Heat excess internally

Excess heat flaming up, or injuries channels and collateral

Red tongue tip, canker sores, nose bleeding, vomit blood, skin sores or boils

Red face, thirsty, constipation, a red or deep red tongue yellow coating, forceful and rapid pulse
Heart vessel obstructed (心脉痹阻)

- **Definition**: refers to the syndrome caused by pathogenic factors (blood stasis, phlegm, cold, or qi stagnation, etc.) blocked heart vessels.

- **Symptoms and signs**: palpitation, oppression and pain in the chest that radiate to the shoulder, back and medial aspect of the upper arms may attack fitfully. Depends on the pathogenic factors, accompany symptoms and signs can be various
# Heart vessels obstruction pattern

<table>
<thead>
<tr>
<th>Etiology</th>
<th>Common symptoms</th>
<th>Characteristics symptoms</th>
</tr>
</thead>
<tbody>
<tr>
<td>Blood stasis</td>
<td>Palpitation, oppression and pain in the chest that radiate to the shoulder, back and medial aspect of the upper arms may attack fitfully</td>
<td>Sharp, prickling or stabbing pain, worse at night, purplish tongue or dark spots on front area, thready and choppy pulse</td>
</tr>
<tr>
<td>Phlegm</td>
<td></td>
<td>Oppression, choking pain, overweight body, profuse phlegm, white greasy tongue coating, and slippery pulse</td>
</tr>
<tr>
<td>Cold</td>
<td>Suddenly attack, severe pain, relieve by warmth, intolerance of cold, cold limbs, pale tongue, deep, slow and or tight pulse</td>
<td></td>
</tr>
<tr>
<td>Qi stagnation</td>
<td>Distending pain, induce or aggravated by emotional stress, hypochondriac distention, slight red tongue, wiry pulse</td>
<td></td>
</tr>
</tbody>
</table>
Etiology and Pathogenesis

Heart vessels obstructed

- Yang qi fails to warm and promote
  - Palpitation, chest distress and pain

Heart channel qi obstructed

- Blood stasis
- Phlegm
- Cold
- Qi

- Pain radiates to shoulder
- Sharp stabbing pain, worse at evening
- Heavy and tight pain, obesity
- Severe pain, sudden onset, relieved by warmth
- Distension pain, induced or worse with emotional stress
Phlegm covering Heart orifice (痰迷心窍)

**Definition:** it refers to signs and symptoms which occur when the heart shen is confused by phlegm

**Symptoms and signs:** there are three different groups clinical manifestations.

- Dian
- Xian
- Phlegm Syncope
**Phlegm covering heart orifice pattern**

<table>
<thead>
<tr>
<th>Type</th>
<th>Common symptoms</th>
<th>Characteristic symptoms</th>
</tr>
</thead>
<tbody>
<tr>
<td>Dian (癫证)</td>
<td>Greasy tongue coating, slippery pulse</td>
<td>depression, apathy, dementia, lethargic stupor, aphasia or soliloquy, laughing or crying inappropriately,</td>
</tr>
<tr>
<td>Xian (痫证)</td>
<td></td>
<td>sudden syncope with drooling saliva and muscles twitch or jerk, rattling sound in throat, may loss consciousness, but patient looks normal after symptoms pass</td>
</tr>
<tr>
<td>Syncope due phlegm (痰厥)</td>
<td></td>
<td>haziness, indistinct and slurred speech, nausea, vomiting, rattling sound in throat, dull facial complexion, or even syncope</td>
</tr>
</tbody>
</table>
Phlegm covering Heart orifice

- Emotional stress
  - Clear yang fails to ascend
    - depression, apathy, dementia, lethargic stupor, aphasia or soliloquy, or loss consciousness

- Pathogenic heat
  - Phlegm combine with Liver wind disturbs Shen
    - sudden syncope with drooling saliva and muscles twitch or jerk, eye straight upward
  - Phlegm accumulation
    - nausea, vomiting, rattling sound in throat, dull facial complexion, greasy coating, slippery pulse
Phlegm fire harassing the heart (痰火扰心)

Definition: It is a syndrome of Shen disturbed by the phlegm-fire. Yang madness (狂 kuáng)

Symptoms and signs: flushed face, fever, thirst, harsh breathing, fidget, mania, restlessness, delirium, slurred speech, rattling sound in throat, yellow sputum, constipation, dark yellow urine. Or insomnia, vexation, incoherent speech, uncontrolled laughing or cry, muttering shouting, manic behavior. Red tongue with greasy yellow coating, a rapid and slippery pulse.
Emotional stress

Pathogenic heat

Excessive heat internally

Phlegm fire harassing the Heart

Phlegm accumulates

Fever, red face and eyes, thirst, hasty breathing, red tongue, rapid pulse

Fever, red face and eyes, thirst, hasty breathing, red tongue, rapid pulse

Excessive heat internally

Phlegm accumulates

Rattling sound in throat, sputum, thick greasy coating, slippery

Fire flaming upward disturbs shen

Insomnia, dream disturbed sleep, irritability, agitation, manic behavior, or coma
## Phlegm covering the heart orifice Vs. Phlegm fire harassing the heart

<table>
<thead>
<tr>
<th>Pattern</th>
<th>Yin/yang</th>
<th>Common</th>
<th>different</th>
</tr>
</thead>
<tbody>
<tr>
<td>Phlegm covering the heart orifice</td>
<td>Yin</td>
<td>Abnormal shen with turbid phlegm accumulation</td>
<td>No heat symptoms: depression, apathy, stupor, dementia, relative stillstand symptoms</td>
</tr>
<tr>
<td>Phlegm fire harassing the heart</td>
<td>Yang</td>
<td>heat symptoms obviously, such as irritability, agitate, vexation, flush face, fever, manic behavior</td>
<td></td>
</tr>
</tbody>
</table>
### Heart fire blazing pattern Vs. Phlegm-fire harassing the heart pattern

<table>
<thead>
<tr>
<th></th>
<th>Heart fire blazing</th>
<th>Phlegm fire harassing the heart</th>
</tr>
</thead>
<tbody>
<tr>
<td>Common</td>
<td>Irritability, flush face, restlessness, agitate, fidget, vexation, irritability, fever, insomnia, yellow urination, constipation, thirst, red tongue, rapid pulse</td>
<td>slurred speech, incoherent speech, uncontrolled laughing or cry, muttering shouting, manic behavior</td>
</tr>
<tr>
<td>Mental condition</td>
<td></td>
<td>rattling sound in throat, yellow sputum</td>
</tr>
<tr>
<td>Other symptoms</td>
<td>Canker sour, or tongue ulcer, nose bleeding or vomiting with blood</td>
<td></td>
</tr>
<tr>
<td>Tongue, pulse</td>
<td></td>
<td>Thick yellow greasy coating, slippery pulse</td>
</tr>
</tbody>
</table>
Small Intestine
Location:
- Lower abdomen, connected with stomach through the pylorus upper and large intestine lower. About 20 feet long

Physiological function
- Controls receiving and transforming
  - Receiving: receiving chime from Stomach
  - Transforming: re-absorb food essence
- Separates fluids: separate clear from turbid
  - Clear fluids: send to Spleen
  - Turbid: liquid send to Bladder, solid send to LI
Abdominal pain and distention

Diarrhea, loose stool, copious urination
Stomach → Small Intestine → Turbid substances → Liquid

Spleen

Clear substances → Spleen

Small Intestine

Turbid substances

Stool

Large Intestine → Bladder → Urine

Solid
Common (key) symptoms for SI patterns

- Abnormal urination: copious urine, or short scanty urination
- Abnormal bowel movement: loose stool or diarrhea
Etiology and pathomechanism of abnormal urination due to Small Intestine dysfunction

Exopathogenic cold, improper diet, aging, improper treatment

Cold

Small Intestine

Heat consumes fluids
Excess fluids pour into Bladder
Abnormal Urination

Fails to separate clear from turbid

Exopathogenic heat, improper diet, emotional stress, improper treatment

Heat
Etiology and pathomechanism of loose stool or diarrhea due to Small Intestine dysfunction

Exopathogenic cold, improper diet, aging, improper treatment

Small Intestine
- Fails to transform and absorb fluids
- Fail to separate clear from turbid

Large Intestine
- Excess fluids purging downward
- Grain and water essence mixed with waste and purging downward

Loose stool or diarrhea

Dilute stools
Small Intestine Disease Pattern

**Excess**
- Excess heat in Small Intestine
- Small Intestine Qi stagnation

**Deficiency**
- Small Intestine deficiency cold
Excess fire in Small Intestine (小肠实火)

Definition: it refers a pattern caused by excessive heat accumulate inside small intestines

Symptoms and signs: irritability, thirst and desire to drink cold water, canker sores or tongue ulcers. Painful, urgent, frequent and burning urination, with scanty dark yellow urine, or blood urine. Red tongue with yellow coating, and a surging and rapid pulse

Key points: frequent, urgent, painful and burning urination, plus excessive heart fire pattern
Pathogenesis

Excess heat in Small Intestine

- Heat flairs up disturbs Shen, and decompose the tongue and mouth tissues
  - Irritable, canker sores, or tongue sores
- Heat impaired body fluids
  - Thirst and desire to drink cold water, scanty and yellow urine
- Small Intestine failed to separate clear from turbid, fluids and heat pour down to the Bladder
  - Frequent, urgent, and painful urination, or blood urine
- Excess heat accumulate internally
  - Red tongue with yellow coating, surging and rapid pulse
Small intestine qi pain (小肠气痛)

► **Definition:** It also been called SI qi stagnation, which refers a syndrome caused by qi stagnate in small intestine with manifest severe pain.

► **Symptoms and signs:** lower abdominal twisting (colicky) pain, which may extend to scrotum, borborygmi, abdominal distention, refuse to pressure, flatulence, abdominal pain relieved by passing gas. A deep and wiry pulse

► **Key points:** lower abdominal twisting pain, borborygmi, and pain relieve by pass gas.
Pathogenesis

Qi Stagnation in Small Intestine

- Qi obstructed in Small Intestine
  - Distension pain, resistant to pressure, relieve by passing gas
- Qi and dampness lodge and stalemate
  - Qipushes Small Intestine sinks into scrotum
  - Scrotum or testicle pain
  - Pathological change located at lower part of the body
  - Pain pushes blood outward, increase vessel's tension
  - Deep pulse
  - Wiry pulse
- borborygmi
Small Intestine deficiency and cold (小肠虚寒)

Definition: a pattern caused by yang deficiency with interior cold accumulation

Symptoms and signs: Dull abdominal pain alleviated by pressure, a desire for hot drinks, borborygmi, loose stool, frequent clear and abundant urination, cold limbs. Pale tongue with white coating, deep weak and slow pulse

Key points: dull abdominal pain, relieve by pressure, loose stool, frequent and copious urine
Pathogenesis

Small Intestine deficiency cold

Yang qi fails to promote

Fails to reabsorb fluid,

Cold constriction and congestion

Dilute stool

Excess fluids pour down to Bladder

Loose stool

Frequent clear copious urine

Abdominal pain, relieve by warmth and pressure

Fear of cold, cold limbs, low energy, pale and flabby tongue, white glossy coating, and deep and feeble pulse
Small intestine qi tied (小肠气结)

- Symptoms and signs: severe abdominal pain, dislike of pressure, abdominal distension, **constipation** (no bowl movement?), vomiting, borborygmi, flatulence. Thick white coating and deep wiry pulse.

- Key points: sudden severe pain, **constipation**?, vomiting, deep and wiry pulse.

Acute appendicitis
Infestation of worms in the small intestine

Abdominal pain and distension, bad taste in mouth

Roundworms (ascarid): abdominal pain, vomiting of round warms, cold limbs

Hookworms: desire to eat strange subject such as soil, wax, uncooked rice or leaf

Pinworms: itchy anus, worse in the evening

Tapeworms: constant hunger