**Pulse Diagnosis**

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**Definition**

Pulse examination is a special diagnostic method. The practitioner uses his fingers to feel the patient’s arterial pulse. Based on the pulse quality, the practitioner can assess the different physiological and pathological states of the patient.

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**Introduction**

- **Principle of pulse image formation**
  1. **Major organ (s) involves with pulse image**
     - **Heart**: Power of the pulse image formation, dominate blood and vessels
     - **Vessels**: vessels are the house of the blood, qi and blood circulate inside the vessels.
2). Qi and blood are the material base to form the pulse image

- The substance of pulse is the blood and the power of pulse is the qi. Qi plays the most leading role to form the pulse image. Under the function of heart qi and Zong qi, heart contraction pumps blood into the vessels to form pulsation.

3). Other Zang Fu and Pulse Image

Clinical Applications of Pulse Diagnosis:
- To determine the disease location
- To differentiate deficiency versus excess
- To differentiate the nature of the disease
- To identify the etiology of the disease
- To determine the disease pathogenesis
- To make a disease prognosis
1. General Pulse Taking
   • Head (upper)
   • Hand (middle)
   • Foot (lower)

2. Three-part method
   • Ren Ying pulse (carotid artery): stomach Qi
   • Cun Kou pulse (radial artery): 12 channels
   • Fu Yang pulse (dorsal artery of foot): Kidney Qi

3. Cun Kou Pulse Taking
   1). Definition of "Cun Kou"
   2). The basic theory for Cun Kou pulse taking
   3). Location and division of Cun Kou
   4). The division of Cun Kou and their corresponding Zang Fu

<table>
<thead>
<tr>
<th></th>
<th>Left Side</th>
<th>Right Side</th>
</tr>
</thead>
<tbody>
<tr>
<td>Cun</td>
<td>Heart and Tan Chong</td>
<td>Lung and chest</td>
</tr>
<tr>
<td>Guan</td>
<td>Liver and diaphragm</td>
<td>Spleen and Stomach</td>
</tr>
<tr>
<td>Chi</td>
<td>Kidney, Urinary Bladder,</td>
<td>Kidney, Ming Mo,</td>
</tr>
<tr>
<td></td>
<td>Small Intestine</td>
<td>Large Intestine</td>
</tr>
</tbody>
</table>

The Location of Pulse Taking

[Diagram showing pulse points on the hand]
The Method of Pulse Taking

1. The Time
2. The Posture
3. Placement of the fingers
   1). Placing the fingers
   2). Finger location
   3). Finger angle
4. Pressure and Three Levels
   1). Touching: superficial level
   2). Pressing: deep level
   3). Seeking: middle level

5. Normal Breath
   One breath = an inhale + an exhale
   Normal pulse = 4 - 5 beats/per breath
   In modern times, Normal pulse = 60 - 90 beats/minute

6. Duration
   Not less than 50 beats, or 2 - 3 minutes

Physiological Pulse

Definition: The “physiological pulse” is also called the “normal pulse”. The normal pulse refers to the pulse found in a healthy person or a patient with a very mild disease which hasn’t yet caused any changes in the pulse. It is also called the “common pulse”, “ordinary pulse”, or “balanced pulse”.

Character: The normal pulse character has an even and gentle pulsation in all three positions which is 4 to 5 beats per breath (60 - 90 beats/minute). It is neither deep nor superficial, neither wide nor thin, neither weak nor forceful, and in equal intervals with a regular rhythm. It includes the following three aspects:
The features of the healthy pulse can be summarized with the following three aspects:

**Full of Stomach Qi (Wei Qi):** The pulse beats are calm, gentle, even with force and a regular rhythm.

**Full of Spirit (Shen):** The pulse beats with a moderate force and even rhythm in a soft vessel.

**Rooted (Gen):** It has two meanings:

- a. The pulse can be felt at the deep level at all three positions: the Cun, Guan and Chi.
- b. The pulse can be felt at Chi position.

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<table>
<thead>
<tr>
<th>Physiological Pulse</th>
<th>Stomach Qi</th>
<th>Shen</th>
<th>Gen</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Pulse Image</strong></td>
<td>The pulse is calm, gentle, even with moderate strength and a regular rhythm</td>
<td>The pulse has moderate force and a unified rhythm in a soft vessel</td>
<td>The pulse can be felt at the deep level in all three positions or at least in the Chi position</td>
</tr>
<tr>
<td><strong>Key Points</strong></td>
<td>smooth, even pulse wave, moderate strength</td>
<td></td>
<td></td>
</tr>
<tr>
<td><strong>Related Organs</strong></td>
<td>Stomach</td>
<td>Heart</td>
<td>Kidney</td>
</tr>
<tr>
<td><strong>Relationship</strong></td>
<td>Stomach Qi (Wei), Shen and Gen are three aspects of the pulse that cannot be separated. If the pulse has Stomach Qi, it must have Shen and Gen.</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

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**Components of a normal pulse**

- Size (Width)
- Depth
- Strength
- Length
- Rate
- Rhythm
- Tension
- Shape
The size (width) of the pulse is the diameter of the blood vessel. It is dependent on the Qi and Blood, which are a reflection of the functions of the Zang Fu organs. When the internal organs are healthy, the pulse’s diameter is normal in size, neither too thin nor too wide.

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Depth

The depth of the pulse means where the pulse can mostly be felt, and there are three levels, superficial, middle and deep. The normal pulse depth should be mainly felt in the middle level with the seeking method. This is a manifestation of sufficiency of the Stomach Qi and shows that the Qi and Blood of the human body can flow freely from the interior to both the exterior as well as Zang Fu organs.

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Strength

Strength is the pulse beating force beneath the finger. The normal pulse should beat forcefully with a moderate strength. It should feel gentle and soft, neither too weak nor too strong in strength. The strength of the pulse reflects the condition of the Qi and Blood. Excessive strength is called “forceful” in this course, while deficient strength will be called “forceless”.

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**Length**

The length of pulse means how long the pulse can be felt. There are three positions, Cun, Guan and Chi.

The normal pulse should be felt at the *Cun, Guan* and *Chi* positions, it should be neither too long nor short. Pulse length is determined by the condition of the *Qi* and Blood. Since *Qi* makes the Blood move, *Qi* plays the major role in the length of the pulse.

**Rate**

The pulse rate means how many time the pulse beating in a certain time.

The normal pulse rate should be four to five beats in one respiratory cycle (one breath) of the practitioner. Pulse rate is determined by a number of factors, of which the state of Yang plays a leading role because it dominates the function of the movement of the Blood via the Lungs and Heart.

**Rhythm**

A normal pulse should beat with a regular rhythm. The rhythm of the pulse is mainly a manifestation of the function of the Heart Qi since the Heart Qi commands the Blood to move through the vessels. The functions of the other organs play a lesser role in the rhythm of the pulse.

A pulse that is arhythmic is called “irregular”.

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**Physiological Pulse**

- **Length**
- **Rate**
- **Rhythm**
Tension

Tension refers to the hardness of the Blood vessels (vasotonia). The normal pulse should be neither too taut nor too slack. The tension of the Blood vessel is predominately a manifestation of the condition of the Qi and Blood.

Shape of the pulse wave

The shape of the normal pulse refers to the rising and dropping of the vessel as the Blood flows through. A pulse beat is composed of two periods: the ascending period of the pulse and the descending period of the pulse. In the normal pulse, the rising and dropping of the pulse are about the same.

Physiological Variations

- The effect of the seasons
- Geographical and environmental factors
- Sex
- Age
- Constitution
- Mental state (emotional affect)
- Physical work or exercise
- Diet: food, drink and medication
- Pregnancy and menstruation
**Pathological Pulse**

**Definition:** The pulse associated with a disease condition is called the pathologic pulse, or morbid pulse.

**Character:** The pathologic pulse refers to an abnormal pulse. This is usually manifested in terms of the pulse location, rate, strength, rhythm, shape, and condition of the pulse.

---

**1. Change in Size (Blood vessel’s diameter)**

1) What is the normal size of the pulse?
2) Why does the Blood vessel’s diameter change and how?
   Blood vessels are overfilled or not filled by: Blood and Qi
3) How does the size of the pulse change?

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**2. Change in Depth**

1) What is the normal depth of the pulse?
2) Upon what does the depth of the pulse depend?
   The depth of the pulse primarily depends on: Qi (Yang Qi).
   Anything that affects the Qi (Yang Qi) will cause a change in the pulse depth.
3) How does the depth of the pulse change?
3. Change in Strength

1) What is the strength of the pulse and what is considered normal strength?
2) Upon what does the strength of the pulse depend? What factors can change the strength of the pulse?
   Strength of the pulse is primarily depends on: Qi
3) How does the strength of the pulse change?

4. Change in Rate

1) What is the normal rate of the pulse?
2) Upon what does the rate of the pulse depend? What factors can affect the pulse’s rate?
   Yang Qi is the force for behind the pulse’s beat.
3) How does the rate of the pulse change?

5. Change in Length

1) What is the length of the pulse and what is considered “normal length”?
2) Upon what does the length of the pulse depend? What factors can affect the pulse’s length?
   Qi and Blood, but Qi plays major role
3) How does the length of pulse change?
6. Change in Rhythm

1) What is the normal pulse rhythm?
2) Upon what does the rhythm of the pulse depend? What factors effect rhythm of the pulse?
   Qi, especially the Heart Qi
3) How does the rhythm of pulse change?

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7. Change in Tension

1) What is the tension of the pulse tension and what is considered normal pulse tension?
2) Upon what does the tension of the pulse depend? What factors can cause a change in pulse tension?
   Blood vessels, Qi and Blood
3) How does the tension of the pulse change?

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8. Change in Shape of Wave

1) What is the normal wave shape of the pulse?
2) Upon what does the wave shape of the pulse depend? Which factors can cause a change in the pulse wave shape?
   Qi and Blood condition, and Blood vessel’s condition
3) How does the pulse shape change?
2. Classification of Pathological Pulses

1) Pulse classified by Yin and Yang
   
   **Yang**: forceful strength, superficial location, rapid speed, long length
   
   **Yin**: weak strength, deep location, slow speed, short length

2) Pulse classified by its component change
   
   **Simple pulse**: only one factor in a pathological state
   
   **Complex pulse**: the pulses that are composed of more than one factor in a pathological state

3) Pulse classified by six categories of key pathological change
   
   deep, superficial, slow, rapid, deficiency and excess

---

**Superficial Pulse**

**Character**: It also call floating pulse. The pulse is distinctly felt on the superficial level. The strength decreases slightly in the deeper levels but without feeling empty.

**Indications**:
- Exterior syndrome
- Deficiency syndrome

**Pulse Image**:

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**Deep Pulse**

**Character**: Located deep next to the bone, it can barely be felt by light touching or moderate force, it is distinct only by pressing down to the bones and tendons.

**Indications**: Interior syndrome

**Pulse Image**:
**Slow Pulse**  ≥Ÿ¬’

**Character:** The pulse beats less than three times per breath, about 40 - 60 bpm, but with a regular rhythm.

**Indications:**
- Cold syndrome
- Qi deficiency

**Pulse Image**

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**Fast Pulse**  ¬’

**Character:** The pulse is rapid and beats over five times per breath (90 - 140 bpm), with a regular rhythm.

**Indications:** Heat syndrome

**Pulse Image**

---

**Excess Pulse**  µ¬’

**Character:** The pulse can be felt in all three positions at all three levels. It is long, large and forceful, giving a feeling of fullness. It is also the general term for all the forceful pulses felt on the three regions and the three levels of pressure.

**Indications:**
- Excess syndrome

**Pulse Image**
### Deficient Pulse

**Character:** The pulse size is wide but without strength (forceless) and slack in tension. The pulse is forceless at all three positions with either light or heavy pressure. It is also the general term for all the forceless pulses felt on the three regions and the three levels of pressure.

**Indications:**
- Deficiency syndrome

**Pulse Image**

<table>
<thead>
<tr>
<th>Character</th>
<th>Image</th>
</tr>
</thead>
<tbody>
<tr>
<td>Deficient Pulse</td>
<td>![Image]</td>
</tr>
</tbody>
</table>

### Large Pulse

**Character:** Also call big pulse. The vessel is wide.

**Indication:**
- Excess heat
- Deficiency

**Pulse Image**

<table>
<thead>
<tr>
<th>Character</th>
<th>Image</th>
</tr>
</thead>
<tbody>
<tr>
<td>Large Pulse</td>
<td>![Image]</td>
</tr>
</tbody>
</table>

### Thready Pulse

**Character:** Also call small pulse or thin pulse. Pulse width is very thin and feels like a fine thread but is very distinct and clear without interruption of rhythm when pushing on the pulse. (Blood vessel’s diameter decreased)

**Indication:**
- Deficiency: Qi, Blood or/and Yin
- Excess: dampness

**Pulse Image**

<table>
<thead>
<tr>
<th>Character</th>
<th>Image</th>
</tr>
</thead>
<tbody>
<tr>
<td>Thready Pulse</td>
<td>![Image]</td>
</tr>
</tbody>
</table>
**Long Pulse (§¬ˆ)\)**

**Character:** Also call *overflowing pulse*. The pulse is smooth and straight. The pulse can be felt to extend distally and proximal to the usual three positions.

**Indication:**
- Liver Yang rising
- Excessive interior heat
- Normal

**Pathological Pulse**

**Short Pulse (∂ìˆ)\)**

**Character:** The pulse cannot be felt in all three positions. The pulse is absent in the Cun and or/Chi positions.

**Indication:** Qi disorder (Stagnation, or deficient)

**Pathological Pulse**

**Rolling Pulse (ª¨¬ˆ)\)**

**Character:** It also call *Slippery pulse*. The pulse moves quickly, smoothly, and slippery inside the vessel. The vessel is plump. Like a pearl rolling on a plate.

**Indication:**
- Food stagnation
- Phlegm or dampness
- Excess heat

**Pathological Pulse**
**Hesitant Pulse ...¨¬ˆ**

**Character:** Also call sluggish, or choppy pulse. The pulse is: (1) slow and wave shape not smooth, (2) or the rhythm is irregular, (3) or irregular in strength and fullness.

**Indication:**
- Excess: stagnation of Qi and Blood, food, phlegm
- Deficiency: Blood or essence

**Pulse Image**

**Surging Pulse ʃÈ¬ˆ**

**Character:** Pulse is wide and forceful though it fades gently. Like a wave in the ocean. The vessel is wide and thick.

**Indication:** Excess heat in the Qi level

**Pulse Image**

**Abrupt Pulse .forName**

**Character:** This pulse also call running pulse or hasty pulse. The pulse beats are rapid with irregular pauses.

**Indications:**
- Excess syndrome
  - Excessive heat
  - Stagnation (Qi, blood, phlegm or food)
- Deficiency of Zang Fu

**Pulse Image**

Greater than 90 b.p.m
Knotted Pulse Ω

**Character:** The pulse beats are slow with irregularly missed beats, the pulse continues immediately.

**Indications:**
- Excess Yin - Stagnation (Qi, phlegm, and blood)
- Cold
- Tumor mass
- Vital Qi deficiency

**Pulse Image**

Less than 60 b.p.m

Intermittent Pulse ¥

**Character:** The pulse is slow and weak, pauses at regular intervals. After the pause, the pulse will wait a moment and then continue beating.

**Indication:**
- Deficiency: Declining Zang Qi
- Excess:
  - Wind syndrome
  - Pain
  - Disorders due to emotional fear and fright

**Pulse Image**

Regularly irregular

Soft Pulse ¶

**Character:** It also calls soggy pulse. The pulse is superficial, thin and hits the fingers without strength.

**Indications:**
- Dampness
- Deficiency of Qi, Blood and Yin

**Pulse Image**
**Weak Pulse \(\text{m} \text{归})\)**

**Character:** Also call *feeble* pulse or *frail* pulse. The pulse is deep and thin, and hits the fingers without strength.

**Indications:**
- Qi and Blood deficiency

**Pulse Image**

![Weak Pulse Image]

**Hollow Pulse \(\text{m} \text{⿴})\)**

**Character:** It also call *scallion stalk*. The pulse is wide and slack when touched lightly and hollow when seeking. On pressing, the edges of the vessel are clearly felt but the center is obscure.

**Indications:**
- Loss of Blood
- Yin depletion

**Pulse Image**

![Hollow Pulse Image]

**Leather Pulse \(\text{⿴} \text{⿴})\)**

**Character:** Also call *drum-skin* pulse or tympanic pulse. The pulse is large (thick and wide), superficial, string-like, taut when touch lightly, and hollow when pressing deeply.

**Indications:**
- Blood loss, Essence exhaustion.
- Abortion, and metrorrhagia & metrostaxis

**Pulse Image**

![Leather Pulse Image]
Pathological Pulse

### Scattered Pulse

**Character:** The pulse is feels wide, superficial, weak and loose without force when touching lightly. It is an indistinct and unclear feeling. The boundary of the vessel is vague. When seeking or pressing the pulse disappears, so that the rate is hard to count.

**Indications:**
- Exhaustion of Qi, Zang Fu organs failure

**Pulse Image**

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### Hidden Pulse

**Character:** The pulse is not felt when touching, seeking or pressing. Only by pressing very heavily to the bone can the pulse be felt. The pulse beats seem to come from beneath the bone and tendons.

**Indications:**
- Pathogens obstruct interior
- Syncope

**Pulse Image**

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### Firm Pulse

**Character:** Also call confined pulse. The pulse is deep, taut, long, wide, fixed and forceful. Deeply located, it cannot be felt by light or moderate pressure.

**Indications:**
- Interior excess cold syndrome (hernia, lumps and masses)

**Pulse Image**

---
Pathological Pulse

Minute Pulse Øε¬

Character: Also call faint pulse. The vessel is extremely thin and forceless. It seems to be felt and then not felt. When pressing deeply, the vessel and pulse become vague. It is like a fine thread.

Indications:
- Deficiency syndrome: Qi, Blood, Yin and Yang

Pulse Image

Wiry Pulse ø"¬

Character: The pulse feels taut, long and forceful whether under pressure of fingers or not, and maintains a straight line beneath the finger.

Indication:
- Liver/GB diseases
- Pain
- Phlegm or malaria

Pulse Image

Tense Pulse ΩÚ¬

Character: Also call tight pulse. The pulse rises and falls with strength and vibrates to the left and right. Its strength is like a tightly twisted rope, unevenly stretched, and snapping back and forth.

Indications:
- Cold syndrome
- Pain
- Food stagnation

Pulse Image
Moderate Pulse "∫¬”
Character: Also call retarded pulse, leisurely pulse or slowed-down pulse. It beats four times per breath.
A. The pulse moves smoothly
B. The movement has a sensation of slowness

Indications:
A. Normal (physiological) pulse
B. Pathological pulse
   • Dampness
   • Spleen and Stomach deficiency

Pulse Image

Moving Pulse ∂\(\theta\)¬”
Character: Also call bouncing pulse, or spinning bean pulse. The pulse is rapid and slippery. At Guan portion, the pulsation is forceful. It is like a bean bouncing in vessels, with well defined peaks, but without head or tail

Indications:
• Severe pain
• Fright

Pulse Image

Swift Pulse ʻs¬”
Character: Also call racing pulse, or hurried pulse. The pulse is more rapid and beats more than 7 times per breath (> 140 - 180 beat/minutes). It is the extreme condition of the rapid pulse. Its rhythm being generally regular

Indications:
• Hyperactivity of Yang and excessive heat
• Yin exhaustion and Vital Qi collapse

Pulse Image
Distinguishing Among Pathological Pulses

Some pulses share components such as length, width, etc., but indicate different pathological changes. In order to make an accurate diagnosis, it is essential that one distinguish between the similar-feeling pulses.

Hollow and Leather Pulse

<table>
<thead>
<tr>
<th>Pulse Shape</th>
<th>Similarities</th>
<th>Differences</th>
</tr>
</thead>
<tbody>
<tr>
<td>Pulse Images</td>
<td>Both are filling, wide and empty in the middle</td>
<td>Soft, as if pressing into the stalk of a green onion, hard and crisp, as if pressing on the surface of a stone</td>
</tr>
<tr>
<td>Indications</td>
<td>Blood loss or yin impairment</td>
<td>Essence exhaustion, abortion, mental fatigue and weakness</td>
</tr>
<tr>
<td>Remarks</td>
<td>Blood vessels are soft</td>
<td>Blood vessels are hard</td>
</tr>
</tbody>
</table>

Large and Flooding Pulse

<table>
<thead>
<tr>
<th>Pulse Shape</th>
<th>Similarities</th>
<th>Differences</th>
</tr>
</thead>
<tbody>
<tr>
<td>Pulse Images</td>
<td>The vessel is wide, the blood vessels' diameter is dilated</td>
<td>The pulse wave comes and goes evenly, the wave arrives stronger than it leaves.</td>
</tr>
<tr>
<td>Indications</td>
<td>Excess heat syndrome</td>
<td>Yin or essence deficiency</td>
</tr>
<tr>
<td>Remarks</td>
<td>Large or flooding pulses can be seen during periumbilical area in normal people.</td>
<td></td>
</tr>
</tbody>
</table>
Excess and Flooding Pulse

<table>
<thead>
<tr>
<th>Distinguishing</th>
<th>Excess Pulse</th>
<th>Floating Pulse</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Pulse Shape</strong></td>
<td>Both are wide and forceful</td>
<td>Birth in the superficial distal part, pulse arrives stronger than leaving</td>
</tr>
<tr>
<td><strong>Pulse Images</strong></td>
<td></td>
<td></td>
</tr>
<tr>
<td><strong>Indications</strong></td>
<td>Excess syndrome</td>
<td>qi and yin deficiencies, Lung, Stomach, and Heart</td>
</tr>
<tr>
<td><strong>Remarks</strong></td>
<td>The floating pulse is one of the excess pulses</td>
<td></td>
</tr>
</tbody>
</table>
Wiry and Tight Pulse

<table>
<thead>
<tr>
<th>Pulse Shape</th>
<th>Wiry Pulse</th>
<th>Tight Pulse</th>
</tr>
</thead>
<tbody>
<tr>
<td>Simplicities</td>
<td>The pulse feels strong, tense, and full.</td>
<td>The pulse feels firm, tight, and full.</td>
</tr>
<tr>
<td>Differences</td>
<td>With or without pressure, the pulse feels firm and full. The left and right sides of the pulse are of similar magnitude.</td>
<td>The pulse feels firm and tight, and the left and right sides of the pulse are of similar magnitude.</td>
</tr>
<tr>
<td>Indications</td>
<td>Like a string stretched on a table</td>
<td>Like a tightly coiled watch spring</td>
</tr>
<tr>
<td>Remarks</td>
<td>The wiry pulse is said to &quot;hinder.&quot; This sensation arises as a result of the vessel that responds with a vibration when palpated.</td>
<td></td>
</tr>
</tbody>
</table>

Soggy and Frail Pulse

<table>
<thead>
<tr>
<th>Pulse Shape</th>
<th>Soggy Pulse</th>
<th>Frail Pulse</th>
</tr>
</thead>
<tbody>
<tr>
<td>Simplicities</td>
<td>The pulse is soft and thin, and indicates a deficiency syndrome.</td>
<td>The pulse is soft and thin, and indicates a deficiency syndrome.</td>
</tr>
<tr>
<td>Differences</td>
<td>Superficial level</td>
<td>Deep level</td>
</tr>
<tr>
<td>Pulse Images</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Indications</td>
<td>General and local tenderness</td>
<td></td>
</tr>
<tr>
<td>Remarks</td>
<td>It is easy to confuse &quot;soggy&quot; with the sensation of a wet sponge, which might be considered soft and perhaps slippery, however, the soggy pulse has three key components: superfi- cial, thin, and weak.</td>
<td></td>
</tr>
</tbody>
</table>
Abrupt, Knotted, and Intermitted Pulse

<table>
<thead>
<tr>
<th>Pulse Shape</th>
<th>Variations</th>
<th>Differences</th>
</tr>
</thead>
<tbody>
<tr>
<td>Rapid Irregular</td>
<td>rapid with irregular pulses</td>
<td></td>
</tr>
<tr>
<td>Slow Irregular</td>
<td>slow with irregular pulses</td>
<td></td>
</tr>
<tr>
<td>Consistently Irregular</td>
<td>normal rate irregular pulses</td>
<td></td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Pulse Images</th>
</tr>
</thead>
<tbody>
<tr>
<td>Indications</td>
</tr>
<tr>
<td>Excess heat, stagnation</td>
</tr>
<tr>
<td>Deficiency syndrome, cold, pain, stress</td>
</tr>
</tbody>
</table>

Scattered, Faint and Deficient Pulse

<table>
<thead>
<tr>
<th>Pulse Shape</th>
<th>Variations</th>
<th>Differences</th>
</tr>
</thead>
<tbody>
<tr>
<td>Scattered</td>
<td>very weak or difficult to count pulse waves</td>
<td></td>
</tr>
<tr>
<td>Faint</td>
<td>independent of depth at which it can be felt</td>
<td></td>
</tr>
<tr>
<td>Deficient</td>
<td>Faint on all depths, but remains constant, slow pulse still feels clear and continuous with pressure</td>
<td></td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Pulse Images</th>
</tr>
</thead>
<tbody>
<tr>
<td>Indications</td>
</tr>
<tr>
<td>Fluctuation, long, fine, fragile, deficiency, severe deficiency</td>
</tr>
<tr>
<td>Deficiency syndrome</td>
</tr>
</tbody>
</table>

Female Pulse
Women undergo unique physiological and pathological changes, such as those affected by menstruation, pregnancy, and childbirth. The pulse will reflect changes that arise during these times. In general, in contrast to the male pulse, the female pulse will be thinner, weaker, and slightly faster. In general, the male pulse will be stronger in the Cun position and weaker in the Chi position, while the female pulse will be weaker in the Cun position and stronger in the Chi position.

**Menstruation Pulse**

1. **Premenstrual or During Menstruation**
   - Left hand Guan and Chi pulse positions will suddenly feel slippery and full, or stronger than the right hand pulses, but without a bitter taste in the mouth, fever, or abdominal bloating. This suggests that menstruation is either occurring or is imminent.

2. **Irregular Menstruation**
   - The pulse is slightly sluggish or frail in the Chi position but normal in the other two positions.

3. **Amenorrhea**
   - If the Chi pulse position is deficient, thin, and choppy, it indicates qi and blood deficiency.
   - If the pulse is submerged, wiry, and choppy, or the Chi pulse position is slippery and intermittent, it indicates excess.
Pregnant Pulse

During pregnancy, the mother’s pulses often become slippery and rapid, especially in the Chi position. (It may show on left side cun position in early stage)

– Male fetus: Left side chi position slipper and forceful. Left side cun position slipper, superficial and big and excess

– Female fetus: Right side chi position deep and excess. Right cun position deep slipper and excess

Antepartum Pulse

Labor and delivery can be predicted when any of the following pulses appear:

• rapid and tight in Chi position
• floating, rapid, and scattered
• deep, thin, and slippery

Agreement (✓) and disagreement (✗)

• “Agrees”: If a certain pulse image is present, certain associated symptoms will also appear; the two are both manifestations of a particular illness. Thus, the pulse image “agrees” with the symptoms. This indicates a favorable pattern that is easily treated.

• “Disagrees”: the pulse and the symptoms do not match or are opposites. This indicates that the pathological changes are complex, presenting an unfavorable pattern that is difficult to treat.
Cause of disagreement
- Sudden onset
- Mild illness
- Internal obstruction
- Coexistence of disease
- Constitutional different

Retaining (_) and abandoning (_)
- False appearances will arise when the pulse quality disagrees with the symptoms. The practitioner should comprehensively analyze the patient's pulse quality and symptoms and distinguish the true from the false to determine which data to retain and which to abandon. To keep the true and abandon the false is the process involved in retaining and abandoning.

Retaining/patterning
- Retaining pulse and abandoning the pattern: the pulse image reflects the true essence of an illness, and the pattern present a false appearance.
- Retaining pattern and abandoning the pulse: the patterns are in accordance with pathological changes, but the pulse image (whether due to the condition of the patient or the influence of the pathogens) is not following the normal rules, then it forms a false quality. The patterns are then given precedence over the pulse image.
Case #1
Abdominal distention and bloating, severe pain which resistant to pressuring, constipation and dry stool. A red tongue with dry yellow tongue coating. Pulse is thin and slow.
Pathology: Excessive heat accumulate inside, obstructed the qi and blood
True: Pattern
False: Pulse

Case #2
A 32 years old female complains of cold hands and feet which worse with emotional stress. Other symptoms and signs include bitter taste in the mouth, irritability, and constipation. Her pulse is slippery and rapid
Pathology: Excess heat obstructed inside and not able to reach outward
True: pulse image
False: Pattern