Pulse Diagnosis
Made Ridiculously Simple

A Webinar in One-Act
March 2, 2010

The problem as I see it.

<table>
<thead>
<tr>
<th>Pinyin</th>
<th>Maciocia</th>
<th>CAM</th>
<th>Wiseman</th>
<th>Eastland</th>
</tr>
</thead>
<tbody>
<tr>
<td>澀</td>
<td>choppy</td>
<td>hesitant</td>
<td>rough</td>
<td>choppy</td>
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<tr>
<td>難</td>
<td>weak</td>
<td>weak</td>
<td>weak</td>
<td>frail</td>
</tr>
<tr>
<td>濁</td>
<td>weak-floating</td>
<td>soft</td>
<td>soggy</td>
<td>soggy</td>
</tr>
</tbody>
</table>

Translation needs vary.

Denotative or literal translations: 〈濡〉 = soggy
Connotative or implied translations: 〈濡〉 = soft
Functional translations: 〈濡〉 = weak-floating
Simple Pulse Qualities
6 Pairs of **ridiculously** simple measurements

1. **Width**: thin-wide
2. **Depth**: superficial-deep
3. **Strength**: forceful-forceless
4. **Rate**: fast-slow
5. **Length**: short-long
6. **Rhythm**: rhythmic-arrhythmic

Simple Pulse Qualities
3 Pairs of slightly less **ridiculously** simple qualities to add.

1. **Tension**: taut-slack
2. **Shape**: slippery-choppy
3. **The Outliers**: vibrating-stable

Pulse Quality Mechanisms

**Width**: thin-wide

- **Thin**
- **Normal**
- **Wide**
Pulse Quality Mechanisms

**Depth:** deep-superficial

- Deep: yang qi obstructed or too deficient to push upward
- Normal: yang qi pushing blood upward
- Superficial: yang qi pushing blood upward

**Strength:** forceful-forceless

- Forceful: yang qi sufficient, heavy
- Forceless: yang qi insufficient, light

**Rate:** fast-slow

- Slow: blood circulation slowed due to yang qi deficiency or obstruction
- Normal: blood circulation at normal rate
- Fast: blood circulation accelerated due to excessive yang
**Pulse Quality Mechanisms**

**Length:** short-long

- Distal Middle Proximal
  - Short
  - Normal Length
  - Long

- Qì and blood flow obstructed or deficient
- Excessive qì and blood flow overfills the vessels

**Rhythm:** rhythmic-arrhythmic

- Blood circulation is irregular due to yìng qì deficiency failing to move blood or pathogenic factor obstructing flow

- Regular Rhythm
- Irregular Rhythm

**Tension:** slack-taut

- Distal Middle Proximal
  - Slack
  - Normal Tension
  - Taut

- Deficient qì and blood fails to fill the vessels
- qì stagnation or constriction of the vessels
Pulse Wave Mechanisms

*Shape:* slippery-choppy

- **Heat damages yin.**
- **Stagnation causes hardness**
- **Dampness increases viscosity**

**Depth**

- **Floating Pulse** *(Superficial)*
  - **key point:** superficial
  - **indications:**
    - *exterior condition:* defensive yang mobilizes externally
    - *yin deficiency:* yin cannot anchor

- **Submerged Pulse** *(Deep)*
  - **key point:** deep
  - **indications:**
    - *(forceful)* *interior excess condition:* excessive pathogenic factors obstruct the outward and upward movement of the qi, blood, and yang.
    - *(forceless)* *interior deficiency condition:* qi and blood cannot fill the channels and thus the pulse remains deep.
**Depth**

**Hidden Pulse**
- **Key Point:** Very deep
- **Indications:**
  - Forceful: pathogens obstructing the interior. Qi and blood cannot flow or lift externally.
  - Forceless: syncope (yang deficiency). Yang is too weak to push the qi and blood outward to the exterior of the body.

**Confined Pulse (Firm)**
- **Key Points:** Deep, forceful, wide, taut, long, stable
- **Indications:**
  - Interior excess cold (hernia, lumps, masses). Yin cold traps yang qi within, can't rise to the surface.

**Rate**

**Slow Pulse (<60 bpm)**
- **Key Point:** Slow
- **Indications:**
  - Forceful: Cold accumulation. Cold causes constriction and contraction leading to slowed movement.
  - Forceless: Deficiency cold. Cold causes constriction and contraction leading to slowed movement.
  - Qi deficiency. Qi commands the blood.
Rate

**Rapid Pulse** (90-120 bpm)
- **key point:** fast
- **indications:**
  - (forceful) *Excess heat:* Excess heat increases the circulation of the qi and blood. This is both thermodynamics and five element theory where heat stimulates the Heart functions.
  - (thin) *Yin deficiency:* causes a relative hyperactivity of yang -> heat.
  - (hollow) *Blood deficiency:* same as yin deficiency -> heat.

![Rapid Pulse Diagram]

**Racing Pulse** (hurried, urgent, swift)
- **key points:** extremely rapid
- **indications:**
  - (forceful) *Excess heat:* heat excites movement of blood -> rapid pulse.
  - (forceless) *Yin exhaustion and/or qi collapse* (deficiency -> heat)

![Racing Pulse Diagram]

**Moderate Pulse** (slowed-down, lax, retarded, leisurely)
- **key points:** feels slow to the fingers, but normal by the clock
- **indications:**
  - *Dampness:* sticky substance impedes flow of qi and blood in vessels.
  - *Spleen/Stomach deficiency:* leads to dampness, then see above.
  - Can also be considered a "normal" pulse.

![Moderate Pulse Diagram]
Force

- **Excessive Pulse** (full, replete)
  - key points: long, wide, forceful on all three depths
  - indications:
    - pathogenic factors with strong antipathogenic qi: xs condition causes xs pulse.

- **Deficiency Pulse** (Empty, Vacuous)
  - key points: forceless at all three levels, can be wide.
  - indications:
    - (floating) Qi deficiency: perhaps related to end stage yang deficiency.
    - (submerged) Internal deficiency: yang can’t rise.
    - (choppy) Blood stagnation due to blood deficiency: deficient fluid to create flow.
    - (slow) Yang deficiency: relative hyperactivity of yang causes width.

Width

- **Large Pulse** (Big)
  - key point: wide
  - indications:
    - (forceful) Excess heat: heat causes blood and qi to move more quickly and dilates blood vessels.
    - (forceless) Deficiency: qi deficiency softens the structural integrity of the vessel.
Width

- Thin Pulse
  - key point: thin
  - indications:
    - Qi deficiency: can’t command the blood, it doesn’t fill the vessels.
    - Yin or blood deficiency: can’t fill the vessel.
    - Dampness: accumulates around vessel, compressing its width.

- Question:
  How do you know when the thin (or deep) pulse is a deficiency, and when it is an accumulation of dampness?

Length

- Long Pulse
  - key point: long
  - indications:
    - normal (tall person, or youngish and healthy)
    - Liver yang rising or excess interior heat: heat causes qi and blood to move excessively leading to expansion of length of pulse
Length

Short Pulse
- key point: short
- indications:
  - (forceful) Qi stagnation: qi commands blood, the vessel is not filled lengthwise.
  - (forceless) Qi deficiency: qi commands blood, the vessel is not filled lengthwise.

Moving Pulse (stirred, spinning bean, bouncing)
- key points: short, round, slippery and rapid, forceful in the middle position (compared to others)
- indications:
  - pain: qi and blood stagnation causes a disharmony of ascending and descending qi and blood. Unable to manifest in all three positions.
  - fright: emotional shock causes qi and blood disturbance and confusion leading to the moving pulse.
Length

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Shape

- **Slippery Pulse** (Rolling)
  - key point: all indications point to earth phase
  - indications:
    - food stagnation: stagnation in earth element -> dampness
    - phlegm or dampness: damp or phlegm cause an increase in blood viscosity and decrease in pulse wave flexibility, hence the smooth pulse without corners.
    - excess heat: qi and blood are mobilized against pathogenic factor, entwined, they cause the pulse to plumpen and entropilate.
    - excess heat: (alternative mechanism) rapid pulse makes it difficult to make out the corners of the pulse wave.

- **Choppy Pulse** (Hesitant, Rough, Sluggish)
  - key points: unsmooth, short, mutable, changes rapidly in both rate and strength
  - indications:
    - forceful: Stagnation of qi, blood, food, or phlegm: pathogens block the vessels and impair the blood circulation.
    - forceless: Deficiency of blood or jing: deficiencies can't fill the vessels, leading to uneven flow.
  - side bar: 3/5 pulse
**Choppy Pulse**

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**Flooding Pulse**

- surging, overflowing
- key points: forceful, wide, comes stronger than going
- indications:
  - qi level heat: represents excess heat (comes strong) with damage to fluids (leaves weak).

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**Wiry Pulse**

- string-taut, taut, string-like, bowstring
- key points: long, taut, stable (not vibrating)
- indications:
  - Liver/Gi disease: tense vascular qi due to qi stagnation being unable to move blood and the blood filling and pressing outward on the vessel.

5 Phase mechanism: tendons are the mother of vessels...

- dry Liver -> dry tendons -> dry vessels -> hard vessels.
Shape

Tight Pulse (tense)
- key points: tense, taut, forceful, vibrating (unstable, movable)
- indications:
  - cold: cold causes constriction, vessel contracts, pulse becomes tight.
  - food stagnation: cold in the middle burner obstructs movement of qi and food.
  - “Vibration” arrives as tautness of the vessel that responds with a vibration when palpated.

Rhythm

Rapid Irregular Pulse (hasty, abrupt, skipping)
- key points: rapid with irregular pauses
- indications:
  - (forceful) Excess heat -> stagnation, or stagnation -> heat.
  - (forceless) Yin and yang deficiency: yin def. -> rapid, yang def. -> irregular

Slow Irregular Pulse (knotted, bound)
- key points: slow with irregular pauses
- indications:
  - (forceful) Stagnation, cold, tumor or masses: pathogenic factors stagnate within the vessels, block blood circulation.
  - (forceless) Heart qi deficiency -> patho.factor: qi and blood are not sufficient to fill the vessels, making it easier for pathogenic factors to fill the vessels leading to the slow irreg. pulse.
Rhythm

- Consistently Irregular Pulse (intermittent, regularly intermittent)
  - Key points: regularly missed beats
  - Indications:
    - (rapid): Wind, pain, emotional shock: pathogenic factors cause qi stagnation and intermittent pulse.
    - (forceless): Qi and/or blood, or Zang Fu qi deficiency: qi and blood deficient to the point of being unable to maintain consistent pulse.

Weak

- Soggy Pulse (weak-floating, soft)
  - Key points: superficial, thin, forceless
  - Indications:
    - Dampness: Damp depresses the vessels, qi and blood cannot easily flow through the vessels -> thin, forceless.
    - Deficiency syndrome: yang loses its root when qi, yin, or blood are deficient.

Weak

- Faint Pulse (Minute)
  - Key points: thin, forceless, vague
  - Indications:
    - Yin, yang, qi, or blood deficiency: four substances can't fill vessel.
      - (superficial) more yin exhaustion
      - (deep) more yang exhaustion
Weak

- Frail Pulse (weak)
  - key points: deep, thin, forceless
  - indications:
    - deficiency of yin, yang, qi, or blood: if deeper, more qi/yang deficiency, if pulse lacks root, more yin/blood deficiency.

Depth-Complex

- Leather Pulse (tympanic, drum-skin)
  - key points: superficial, forceful, taut, wide, and hollow
  - indications:
    - blood loss, abortion, jing exhaustion: sudden loss of blood or jing causes qi to float with the hollow insides due to sudden lack of blood or jing.

Depth-Complex

- Hollow Pulse (scallion stalk, onion)
  - key points: floating, wide, slack, with an obscure center
  - indications:
    - (forceless) Loss of blood: sudden loss of blood, the yin cannot fill the center or anchor the yang.
    - (rapid) Loss of yin: yin can't fill center, yang floats, and deficiency heat -> rapid pulse.
Constitutional Exceptions

"Opposite Middle Pulse" (fan guan mai): radial artery is found on the dorsal side of the radius (on the Large Intestine channel).

"Deviated Angle Pulse" (xie fei mai): radial artery is not found along the Lung channel, but anywhere else.

Clinical Applications

The Yin Deficient Pulse

Thank you for making this a Ridiculously wonderful webinar

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