## **Pulse Diagnosis**

Please Note: THE SECOND SLIDE (of the AHG webinar) DESCRIBING THE LONG PULSE MISTAKENLY WAS DESCRIBING THE THIN PULSE. THE LONG PULSE IS AN INDICATION OF POSSIBLE LIVER YANG RISING HYPERTENSION. http://www.planetherbs.com/

Taken on the radial artery of both hand wrists.

Three positions with two depths on each represent the 12 internal TCM organ functions.

Begin by evaluating the overall quality of the pulse in all positions but especially where it is most easily perceived which is in the middle guan position just over the styloid bone.

## Four basic pulses:

1. Floating, 2. Deep, 3. Slow, 4. Rapid

## Four basic categories of disease:

1. Cold, 2. Heat, 3. Excess, 4. Deficiency Possibly beyond this Stagnation or congestion.

Floating and or deep is relatively easy to determine. Floating is felt more on the surface as opposed to deep where one has to palpate deeper on the vein.

Slow and rapid is the easiest to determine. Count the number of beats within 15 seconds and multiply by four. If more than 80 it is rapid or racing. If it is less than 60 it is slow.

# Ask oneself the following:

- 1. Is the pulse fast or slow?
- 2. Is it floating or deep"
- 3. Does it have force or not?
- 4. Is it long or short?

Fast or slow is simply counting the beats. Floating or deep, force or no force is its response to pressure. Long or short is whether it can be felt all the way to the proximal 3<sup>rd</sup> or "chi" position.

Learn the quality of the pulses before learning the meaning. This is because pulses can have more than one quality. Later other signs and symptoms can help to determine or refine one's understand of a particular pulse quality.

Further subdivide the qualities in terms of the following chart:

Floating	Deep	Slow	Rapid
Floating	Deep	Slow	Rapid
Hollow or leek stalk	Hidden	Bound (knotted) (irregularly irregular)	Skipping
Drumskin	Confined	Regularly intermittent	Racing
Soft or soggy	Weak	Choppy	Stirring
Vacuous			
Surging			
Scattered			

## Distinguish between the pairs of opposites:

Floating – deep

Fast- slow

Slippery – choppy

Long – short

Excess (strong) – deficient (weak)

The Forceful pulses are: excess, wiry, tight, stirring, slippery, confined, long and large.

The forceless pulses are minute or thready, weak, vacuous, hollow, scattered, soggy and regularly irregular.

In addition the pulses can be either slight or more of each quality.

Ideally the pulse is taken early in the morning, just before sunrise when yin and yang cosmically is more in balance. The pulse is influenced by activities, food, emotional upset, etc. So briefly ask about recent activities.

The palm of the hand should be held on a level just below the wrist with the hand slightly face up.

Be sure the breath is normal. In antiquity the standard for measuring beats was based on the respiration of the practitioner. So the practitioner's breath should be relaxed and unconstrained. Normal pattern was four impulses per one normal inhale and exhalation of the practitioner. 5 or more mean't more rapid and 3 or less was slow.

#### Position

Cun, Guan, Chi

Place the middle finger over the middle bar or guan position. The index finger over the distil cun position and the ring finger on the proximal chi position.

Palpate the pulses together in all three position, at different depths and in separate positions.

The amount of time should be about a minute. The pulse need only be taken to determine a particular nuance of a disease i.e. hot-cold, excess-deficient, internal-deficient, stagnant blood and qi, etc. For instance if a patient has a cold, flu, fever, sore throat, etc. the pulse need only be used to determine if it is hot or cold unless other signs cause one to consider other things are going on.

For a more constitutional evaluation one can take up to 15 minutes for a pulse evaluation.

The pulses are taken in a comfortable meditative position, sometimes with the patient's wrists positioned on a small cushion or pad.

# There are 10 pattern discriminations with associated pulse images.

- 1. Eight principles
- 2. Five phase
- 3. Qi and blood
- 4. Fluids and humours
- 5. Viscera and bowels
- 6. Channel and network vessels
- 7. Diseases
- 8. Six stages
- 9. Four levels of heat

# 10. Triple burner

We will learn the Eight principles pattern discrimination as the first level of evaluating yin and yang nature of disease.

<u>Pattern</u>	<u>Pulse</u>	<u>Pattern</u>	<u>Pulse</u>
Exterior	floating	Interior cold	Deep-slow
Interior	Deep	Internal heat	Deep, rapid
Cold	Slow	Internal	Weak
		deficiency	
Hot	Rapid	<b>Interior excess</b>	Deep, excess
Deficiency	Vacuous, fine,	Yin deficiency	Fine, rapid
	soft, weak		
Excess	Excess	Yang deficiency	Weak
External cold	Floating, tight	Qi deficiency	Fine, rapid, soft
External	Floating, relaxed	<b>Blood deficiency</b>	Fine (thready)
deficiency			
External heat	Floating, rapid	Yin collapse	Fine, rapid, soft
<b>External excess</b>	Floating, rapid	Yang collapse	Minute, weak

Qi and Blood pattern discrimination and the pulse:

Pattern	Pulse	Pattern	Pulse
Qi deficiency	Vacuous	Blood deficiency	Fine or thready
Qi collapse	Vacuous	Blood stasis	Fine, slow,
			choppy
Qi stagnation	Slippery, excess	Blood heat	Rapid
Qi counterflow	Wiry, slippery		

The 28 Pulses and their meaning

## Rate

1. slow, 2. Rapid, 3. Moderate

## Slow-indicates non-free flow of yang qi due to either vacuity or obstruction

1. Slow (Chi mai) – below 60 beats per minute Meaning: Cold, Yin, internal. If it is also floating it is yang deficiency. If deep is is lack of yang-fire 2. Relaxed, Moderate (Hun mai) – slightly slow, around 60 to 78 BPM beats per minute

## Rapid- indicates yang qi moving rapidly

- 3. Rapid (Shuo mai) above 82 beats per minute
  - Meaning: Yang pulse often suggests bowel heat (constipation). Floating and rapid without strength is yin deficiency. Deep and rapid with strength is internal excess heat,
- 4. Racing (Ji mai) very rapid, above 120 beats per minute Meaning: Excess yang, Heat and deficient yin

#### **Moderate**

5. Relaxed, Moderate (Huan mai) – slightly slow, around 60 to 78 BPM beats per minute

Meaning: Normal but it can also indicate some Spleen Dampness

# **Depth**

1. Floating, 2. Deep 3. Hidden

## Floating – indicates yang qi in the upper and outer parts of the body

6. Floating (Fu Mai) – felt on the surface, becomes weaker with increased pressure; rebounds to original strength when pressure is released.

Meaning: 1. External pathogen 2. Yin deficiency 3. Yang qi loses its root and floats upwards – each of these are determined by other corroborating symptoms

## <u>Deep – indicates yang qi in the lower and inner regions of the body</u>

7. Deep (Chen Mai) – cannot be felt with light of moderate pressure, only with heavy pressure

Meaning: Yin pulse. Internl evile, also possible qi stagnation and deficiency.

8. Hidden (Fu mai) – very deep, very fine, very forceless Meaning: Internal disease.

# Length

#### 1. Long Pulse, 2. Short pulse

- 9. Long (Chang mai) Continuously palpable throughout all three positions Meaning: Can represent qi counterflow, fire (inflammatory) excess but also a non-disease.
- 10. Short (Duan mai) Cannot be felt in all three position, felt only in middle or proximal position or it can feel shorter than normal in any position Meaning: qi and deficiency patterns

### Width

11. Thin or Thready (Xi mai) – feels like a fine thread Meaning: All kinds of vacuity and insufficiency. Blood deficiency; Fine and rapid, vin vacuity with internal heat; Fine and slow, qi and yang deficiency

# Rhythm

## 1. Skipping, 2. Knotted 3. Intermittent

- 12. Skipping (Cu mai)— rapid and irregularly irregular Meaning: Fire and inflammation also possible qi stagnation.
- 13. Bound or Knotted (Jie mai) slow and irregularly irregular Meaning: accumulation, stagnation, stasis and obstruction.
- 14. Regularly intermittent (Dai mai) slow and regularly intermittent (refer to MD or ER)

### **Arterial Wall Tension**

- 1. Wiry or bowstring, 2. Tight, 3. Hollow or scallion stalk, 4. Drumskin, 5. Scattered
- 15. Bowstring (Xian mai) (Wiry pulse)— feels fine, like a taut guitar string Meaning: Nervous tension, Liver wind and qi stagnation, also rheumatic and pain patterns.
- 16. Tight (Jin mai) feels like a twisted rope and is larger than bowstring Meaning: Cold
- 17. Hollow (Kou Mai) floating, large, forceless, empty in the center Meaning: Blood loss.
- 18. Drumskin (Ge Mai) floating, large, hard, empty in the center Meaning: External cold excess. In males it can be essence blood consumption. If females it can mean miscarriage.
- 19. Scattered (San Mai) floating, large, forceless, no edges, empty in the center Meaning: Kidney Qi debility and decay. Can be a sign of impending death.

# Force

- 1. Replete or Excess, 2. Firm, 3. Vacuous, 4. Weak, 5. Soft or Soggy
- 20. Large (Shi mai) feels wide, long, tight
- Meaning: excess heat, fire, and inflammation 21. Firm (Lao mai) – Large, tight (more inhibited) excess or forceful, stronger than
  - the hidden pulse.

    Meaning: Excess accumulation patterns with stagnation.
- 22. Empty (Xu Mai) floating, large, forceless Meaning: Blood deficiency, heat stroke
- 23. Faint (Wei mai) extremely fine and forceless, barely palpable Collapse of Yang, great qi and blood debility. It can also represent and incurable disease.
- 24. Weak (Ruo Mai) deep, fine, forceless Meaning: Yang deficiency. Not always critical.
- 25. Soggy (Ru Mai) floating, fine, forceless Meaning: Yin deficiency. Kidney, essence and marrow deficiency.

## **Pulse Contour and Flow Wave**

- 1. Slippery, 2. Choppy or Rough, 3. Flooding or Surging, 3. Stirred or Moving
- 26. Slippery (Hua mai) horizontal gliding, smooth, and slippery to touch Meaning: 1. Blood exuberance, heat (pregnancy) or 2. Phlegm and food stagnation.

- 27. Choppy (Se mai) slow, fine, irregular rate and strength without actually skipping beats
  - Meaning: blood deficiency, damaged essence, also possible qi stagnation or cold damp conditions.
- 28. Surging (Hong Mai) floating, large, forceful Meaning: excess evil, fire hyperactive. If surging and forceless it is yin deficiency, Fire floating and water drying up.
- 29. Stirring (Dong mai) rapid, slippery, forceful, either in the middle position only or possibly vibrating

Meaning: Indicates pain and diseases caused by fright

## The Six positions on each wrist

### Right Hand

	Surface	Deep
Cun	Large intestine	Lung
Guan	Stomach	Spleen
Chi	Kidney yang or	Kidney Yang or
	Triple warmer	Pericardium

#### Left Hand

	Surface	Deep
Cun	Small Intestine	Heart
Guan	Gall Bladder	Liver
Chi	Kidney yin or	Kidney yin or
	Bladder	Kidneys

Current practice is to designate only kidney yin and kidney yang respectively at the left and right chi position of each hand respectively.

## **Quick Reference to the 28 Chinese Pulses**

#### Floating – indicates yang qi in the upper and outer parts of the body

- 1. Floating felt on the surface, becomes weaker with increased pressure; rebounds to original strength when pressure is released.
- 2. Vacuous floating, large, forceless
- 3. Scallion-stalk floating, large, forceless, empty in the center
- 4. Scattered floating, large, forceless, no edges, empty in the center
- 5. Surging- floating, large, forceful
- 6. Drumskin floating, large, hard, empty in the center
- 7. Soggy- floating, fine, forceless

#### Deep – indicates yang qi in the lower and inner regions of the body

- 1. Deep cannot be felt with light of moderate pressure, only with heavy pressure
- 2. Weak deep, fine, forceless
- 3. hidden very deep, very fine, very forceless
- 4. Confined very deep, bowstring, forceless

#### Slow-indicates non-free flow of yang qi due to either vacuity or obstruction

- 1. Slow below 60 beats per minute
- 2. Relaxed slightly slow, around 60 beats per minute
- 3. Bound slow and irregularly intermittent
- 4. Regularly intermittent slow and regularly intermittent (refer to MD or ER)
- 5. Choppy slow, fine, irregular rate and strength without actually skipping beats

#### Rapid- indicates yang qi moving rapidly

- 1. Rapid above 82 beats per minute
- 2. Racing very rapid, above 120 beats per minute
- 3. Skipping rapid and irregularly irregular
- 4. Stirring rapid, slippery, forceful, either in the middle position only or possibly vibrating

#### **Miscellaneous Pulses**

- 1. Slippery horizontal gliding, smooth, and slippery to touch
- 2. Bowstring feels fine, like a taut guitar string
- 3. Tight feels like a tight rope and is larger than bowstring
- 4. Fine (thready) feels like a fine thread
- 5. Large feels wide
- 6. Faint extremely fine and forceless, barely palpable

- 7. Short Cannot be felt in all three position, felt only in middle or proximal position or it can feel shorter than normal in any position
- 8. Long Continuously palpable throughout all three positions

Source: Secret of Chinese Pulse Diagnosis, Bob Flaws, Blue Poppy Press, 1-800-487-9296