Pulse Examination

Rate, Depth, Strength, Quality

We can examine the pulse by asking ourselves a series of questions:

Rate

*"What is the rate? Is it **rapid** or is it **slow**?"*

To determine the rate, simply count the beats. If the rate is greater than 90 bpm, then you are feeling a *rapid pulse* (数脉 shù mài). If the rate is less than 60 bpm, then you are feeling a slow pulse (迟脉 chí mài).

数脉 - shù mài *rapid pulse*	• > 90 beats per minute	
迟脉 - chí mài *slow pulse*	• < 60 beats per minute	

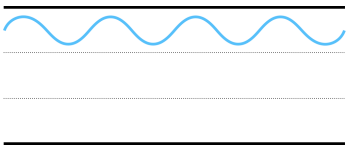
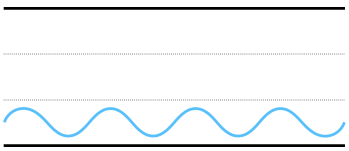
Finger Technique: *Searching*
Find the pulse where you can feel the beats most clearly, then don't move the fingers. Just count the beats.

Depth

*"What is the depth of the pulse? Is it **superficial** or is it **deep**?"*

To determine the depth, pay attention to how deeply you have to press in order to feel the beats of the pulse. If you feel the pulse near the skin and with relatively light pressure, then you are feeling a *superficial pulse* or a *floating pulse* (these are both translations of 浮脉 fú mài). If

you feel the pulse closer to the bone and with heavier pressure, then you are feeling a *deep pulse* (沉脉 chén mài).

浮脉 - fú mài • *floating pulse* • *superficial pulse*	• felt at the surface near the skin • felt with light pressure	
沉脉 - chén mài *deep pulse*	• felt deeper near the bone • felt with heavy pressure	

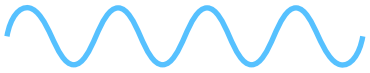
Finger Technique: *Lifting and Pressing*
Start by placing the fingers lightly on the skin. Slowly increase the pressure and press in deeper until you can clearly feel the beats of the pulse. Make a note of that level. You can also push down deeper to the bone and then lift up until you feel the pulse disappear.

Strength

*"What is the strength of the pulse? Is it **forceful** or is it **forceless**?"*

To determine the strength, pay attention to how strongly each beat hits your finger. If the beats hit your fingers strongly and with force, the pulse is said to *have force* or be *forceful* (有力 yǒu lì). If the beats hit your finger weakly and without force, then the pulse is said to be *without force* or *forceless* (无力 wú lì).

(Note: "forceful" and "forceless" are not pulse images by themselves. However, they are often used as adjectives within the 28 pulse images, so it is still important to pay attention to.)

有力 - yǒu lì *forceful*	• the beats hit the fingertips strongly and with force	
无力 - wú lì *forceless*	• the beats hit the fingertips weakly and without force	

Finger Technique: *Lifting and Pressing*

If your fingers are just on the surface of the vessel, you may need to press in deeper in order to clearly feel the strength of the beats. If you press too deeply into the vessel then you may be obliterating the pulse. In that case, you may need to lift the fingers slightly in order to feel the strength of the beats.

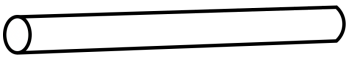
Quality

The quality of the pulse can refer to which of the 28 pulse images the pulse belongs to. In order to determine this, we can begin by asking ourselves more questions about the shape of the vessel and how smoothly the blood is flowing:

Diameter

*“What is the diameter of the vessel? Is it **thin** or is it **large**?”*

Move your fingers around the vessels and pay attention to the width of the vessel or the diameter of the vessel. If the vessel is narrow in diameter, then you are feeling a *thin pulse*, *fine pulse*, or *thready pulse* (these are all translations of 细脉 xì mài). If the vessel is wide in diameter, that is a *large pulse* (大脉 dà mài).

细脉 - xì mài • *thin pulse* • *fine pulse* • *thready pulse* • *small pulse*	• the vessel is thin in diameter	
大脉 - dà mài *large pulse*	• the vessel is large in diameter	

Finger Technique: *Pushing*

Move the fingers side-to-side across the vessel (in a medial-lateral direction) to determine the diameter of the vessel.

Vessel Wall

“Does the vessel have a hard edge? Is the vessel tense and rigid, or is it soft?”

Here you can pay attention to vessel wall to determine if is has a hard edge. If the vessels has a crisp, distinct, hard edge, then you are feeling a *wiry pulse*, *bowstring pulse*, or *string-taut pulse* (these are all translations of 弦脉 xián mài). If the pulse does not have a hard edge (it is soft and squishy), then that is not a wiry pulse.

(Note: some books will use the terms “soft” or “relaxed” to describe a pulse that is not wiry, but these should not be confused with distinct pulse images of the same name.)

弦脉 - xián mài • *wiry pulse* • *bowstring pulse* • *string-taut pulse*	• the vessel wall has hard edges that are clear and distinct

Finger Technique: *Lifting, Pushing*

Lift the fingers slightly so that you are feeling the wall of the vessel, then move the fingers side-to-side across the vessel (in a medial-lateral direction) to determine the vessel has a hard edge.

Flow

"How smoothly is the blood flowing through the vessel? Is it smooth or is it rough?"

Here, instead of feeling the shape of the vessel or the wall of the vessel, you are feeling for how smoothly the blood is flowing through the vessel. If the blood is flowing smoothly, then you are feeling a *slippery pulse* or a *rolling pulse* (these are both translations of 滑脉 huá mài). If the blood is not flowing smoothly, then you are feeling a *rough pulse*, *choppy pulse*, or *hesitant pulse* (these are all translations of 涩脉 sè mài). If the blood is not flowing smoothly, then pulse may seem to speed up and slow down, it may hit the fingers with different amounts of force, or the beats may seem to hesitate.

滑脉 - huá mài • *slippery pulse* • *rolling pulse*	• the blood is flowing smoothly through the vessel • it may seem like the pulse is "slipping away" under the fingers	
涩脉 - sè mài • *rough pulse* • *choppy pulse* • *hesitant pulse*	• the blood is ***not*** flowing smoothly through the vessel • the pulse may speed up and slow down, the beats may hit the fingers with different amounts of force, or the beat may seem to hesitate	

Finger Technique: *Lifting and Pressing*

You may need to press slightly deeper in order to feel the flow of the blood rather than the wall of the vessel. Once there, you may need to lift and press slightly in order to feel the contour of the wave.