

Commentary on Fundamentals Pulses Qualities

by James Ramholz

Introduction

Energy, information, and time are inseparable aspects of the self-organization of living systems. That self-organization and everything that happens to the body and mind—emotions, interactions with the environment, changes in physiological processes or physical structure—is immediately reflected in the pulses. It is the only real-time system of diagnosis.

As an organized group, the 12 pulses discussed here display essential insights into the dynamics of pulse diagnosis and how that dynamics, in turn, interconnects Chinese medical theory, pattern differentiation, and clinical practice. These insights and expanded definitions in Chinese medical theory have evolved since the early twentieth century from the research, clinical observations, and genius of Jiang Jing, the head of the Dong Han system. They represent an innovation in Chinese medicine both in the way that it expands Chinese medical theory and in the way it is a natural counterpart to many features of Western nonlinear science and medicine. The perspective that Dong Han pulse diagnosis offers is not unlike Western science's view of a dynamical systems which consists of an abstract phase space or state space whose coordinates describe the dynamical state at any instant.

In this article, have divided my comments on pulse qualities into two parts—the standard definition and the expanded definition used in the Dong Han system. In this way, I hope the reader will be able to better follow the logic of the Dong Han system. In a later article, I will write in more detail about the way the physical diagnostic space of each position can be broken down into significant sectors—2, 3, 5, 6, 8, 9, 10, 27, or 81—which can display fractal dimensions of the pulse. Each system of sectors offers a different and unique perspective into the dynamics of the pulse positions.

The Fundamental Pulses

- Normal (zheng chang mai) and Scattered (san)
 - Floating (fu) & Sunken (chen)(with the Dong Han expanded definitions of Floating and Sinking)
- Rapid (shuo) & Slow (chi)
- Big (da) / Small (shao), Long (chang) / Short (duan)
 - Slippery (hua) & Choppy (se)
 - Drum-skin (ge) and Knotting (jie)(with the Dong Han Advanced Drum-skin and Advanced Knotting)

The Healthy or Balanced Pulse

All pulse theory can be derived from—and ultimately refers back to—the dynamics of a balanced or normal pulse best illustrated by the sine curve found in Tai Chi symbol. A break in this dynamical symmetry is the foundation for Li Shi Zhen’s fourfold criterion:

. . . the four principles—Floating, sinking, slow, and rapid. Once they are understood, by elaborating on them, the entire subject can be clarified.

The Normal pulse is often associated with the stomach qi because it is the organ which supplies nourishment and support for all others. Together with the spleen, the Earth Phase absorbs, coordinates, transforms, and provides the substantialness of the wave in general. The substantive quality attributed to this pulse character is also indicative of its nurturing and supportive role. Its central importance is emphasized in the seasonal 5-Phase scheme, where each Phase communicates with the earth before cycling to the next in the creation (sheng) cycle.

Normal Pulse (zheng chang mai): A steady, even pulse with approximately four beats per respiration. Its significance is threefold. Its smoothness and forceful indicate the presence of spirit. It is neither sunken nor Floating, and the beat arrives and departs evenly and effortlessly, indicating the presence of stomach qi. Forcefulness at the deep level indicates the presence of root.

In a healthy person, all the pulses should present this smooth, balanced sine wave movement connected at all positions, depths, and during the entire year; not only in late summer. The energy movement of the each season does not replace it but adds its characteristic to the patient’s overall energetic movement. The interactions of the seasonal and the personal pulse movements uniquely describe the patient’s reaction to the seasonal change. While the seasonal energy will always have some influence in the pulses, other factors may have a much stronger and immediate influence.

Li Shi Zhen’s concepts of the different qualities of a normal pulse in section 3.2 (*fn*) are neither “normal” nor “healthy” in either a theoretical or clinical sense. This data essentially repeats the pathological indications described later in the book by the terms scattered, choppy, blocked, Wiry, tight, slippery, soft, etc. Only the description of the middle pulse of the spleen and stomach feeling “regular, neither fast nor slow” accurately portrays the symmetry,

energetic balance, coordination, and harmony expected in a healthy pulse movement. This confusion is due the zang/fu perspective that a normal pulse is a combination of the organ's self-pulse (Wiry for the liver, etc.) and stomach qi.

In the Dong Han system, we reserve the word “normal” only for a healthy and balanced pulse (zheng chang mai)—the most important goal of any clinical treatment. Clearly, these pulses are “normal” only in the general sense that they are associated with those organs or problems typically attributed with that organ. In actual clinical practice, if the liver showed only a Wiry pulse, it means the organ is no longer in communication with the other phases; it is becoming energetically isolated. As it becomes more Wiry, the patient will develop various types of liver function problems. For example, if we see a Wiry movement in the second half of the liver pulse at the organic depth without support in the first half of the liver position or connection from the kidney pulse, it can mean that a stroke is immanent. A Wiry pulse that becomes thinner indicates not only isolation but the diminishing capacity of the liver energy itself. In this case, the energy is in danger of being “cut” by the metal Phase. This is a death pulse.

To avoid this confusion, we analyze the basic wave by dividing it into its 5-Phase components—changing from TCM's base-2 to base-5. The Normal pulse begins with an ascending or yang movement. The convex portion indicates the yang energy or qi of the movement [*abc*], while the concave portion describes the state of yin energy or blood of each organ [*cda*]. To determine the balance within this movement, check the size, angles, volume, speed, and texture of the yang portion and compare them to the yin portion. Ideally, the yin and yang portions of each pulse should be symmetrical, hold the same vertical and horizontal capacity, and display the same textures. A sharper angle of ascent indicates that the pulse contains more yang energy or heat; a smoother angle indicates that yin is more prevalent. If the ascending movement is more prominent, the pulse will have a tendency to Float; when the descending movement is more prominent it will have a tendency to sink. If the rising movement is dominant it can also be a tendency to be more superficial or express an acute syndrome. If it is a chronic condition, the syndrome expressed will be light, superficial, or immediate.

Pulse Wave Energy Segments

ab qi/Yang of yang/function

bc qi/Yin of yang/function

cd xue/Yin of yin/capacity

da xue/Yang of yin/capacity

If the pulse begins with a descending motion (the pulse wave is a cosine), the organ energy is reversing. If more than one pulse position presents this reversal, the Mother-Son rule of 5-Phases theory is breaking down and the condition is becoming critical.

Symptoms are created by significant contrasts in function, energy, or movement. The capacity of a pulse movement to create symptoms can be measured by the area of the yang [*abc*] or yin [*cda*] portion of the pulse. For example, if the yin portion of the pulse is larger, then the yin energy has the greater capacity to express a symptom. While the pulse is not necessarily

compelled to express this capacity in a symptom, we can see the potential for expression; the patient may or may not be aware of this imbalance. So our diagnosis does not have to be limited to or rely solely on the patient's report of their symptoms. We can often observe problems before patients may even become aware of them. This ability to diagnose problems before symptoms is helpful in discriminating the root of the problem from the branch, as well as in cases where the patient has forgotten or is hiding aspects of their condition.

Floating Pulse

Floating pulse (*fu mai*): A pulse pronounced at the superficial level, but vacuous at the deep level, described as being "like wood floating on water." A Floating pulse is felt as soon as the fingers touch the skin, but becomes markedly less perceptible when further pressure is applied. Although classically associated with exterior patterns, the Floating pulse may be indistinct in patients of heavy build, with weak constitutions, or suffering from severe water swelling, even when an exterior pattern is present. A Floating pulse may also occur in enduring illnesses or after a major loss of blood, indicating a severe insufficiency of right qi rather than an exterior pattern. It is said, "A Floating pulse seen in enduring illness is cause for great concern." A Floating pulse in these cases differs slightly from the Floating pulse occurring in external disease in that it is somewhat less pronounced at the superficial level, and markedly less pronounced at the deep level, for which reason it is sometimes referred to as a vacuous Floating pulse.

Classically this pulsation has been described as a piece of wood floating on water. This wave form changes with the finger pressure. When finger pressure is applied, it disappears; and when the finger is lifted, it feels stronger again. Also, when pressed, it can feel shorter if it is strongly ascending; but when the pressure is lifted it becomes longer. In general, it resonates up to the skin depth because it is more yang and may carry heat.

It indicates wind movement in the body or depletion of qi. When this pulse is strong, it indicates strong wind movement. If the pulse is weak, it indicates depletion of qi. In general, if wind movement is caused by depletion (*xu*) of an organ, the pulse will float. Floating and slow indicates wind and cold. Floating and fast indicates wind and heat.

This pulse can often be observed in high blood pressure patients because that condition is often related to internal wind movement. When you feel a Floating pulse but the patient doesn't yet have any overt problem, it may also indicate a hangover, that the patient has traveled a long distance and is physically exhausted, that the patient just got out of a hot tub, or that he is being affected by very hot climate. When a Floating pulse is fast and then turns to slow, this indicates a change from heat to dryness. In passing from heat to dryness it goes through dampness; this is sometimes referred to as drying up of the earth body fluids. The main quality of this pulse shape is that it describes the organic activity happening at the superficial level. This can be due either to the excess of the environment or emptiness of the interior.

If the Distal pulse is Floating, it indicates that perverse wind energy is attacking the upper jiao of the body. This can cause headache and excessive mucus production. The mucus will obstruct the upper warmer.

If the Middle position has a Floating pulse, it usually indicates weakness of the spleen affecting the middle jiao, or an excess of liver qi.

If the Proximal position has a Floating pulse, there will be a difficulty in passing urine or stools because the natural movement of those materials is downward and this pulse moves against that direction in the lower jiao.

Dong Han Commentary

This pulse shows more yang energy movement. If a pulse is Floating it means that it does not have sufficient yin energy or root—this is the most important concept. But this does not immediately imply that it contains heat. It is on the surface because yin is not pulling it down. So it can Float without showing any heat at all; or it can carry cold energy or some emotional content at the same time.

If a Floating pulse is due to perverse exterior energy invading the body, then it could also indicate the direction of that invasion or attack. Our system of pulse reading examines directionality at all times—that is the dynamic interaction between organs and parts of the body. If, for instance, perverse energy is entering the body from the surface, it will be coming in from the superficial layer but at the same time it will be showing a certain directional movement towards going deeper. So the pulse will be Floating but at the same time it can show a direction that is penetrating deeper.

In the Dong Han tradition, we expand this concept and look at the movement as a product of space, energy, and time. The first thing we have to make clear about the Floating pulse is that does not mean that a pulse has to necessarily be near the surface of the skin in order to be called Floating. When we use 3-Depths, 9-Sectors, 27-Sectors, or 81-Sectors per position, the Floating activity can be found in any of the sectors; so we can have a Floating pulse in the deep layer too. In this case, for example, it often indicates a deeper or unexpressed emotion—subconscious or unconscious. When working with different depths, an expanded definition of the Floating pulse will include a pulse that has a stronger tendency on the upbeat. In deeper parts of a position a pulse may also be considered to have a Floating quality if it has the sensation of buoyancy created by its upbeat movement and with no sufficient yin in the downbeat.

Because a Floating pulse does not have the root, the movement is not balanced to the down beat and it can feel buoyant even at deeper sectors, like holding a cork underwater. Keep in mind here that when we press down to the bottom third depth of a pulse position, we are creating a fractal dimension of the whole position. The movement is Floating at the “surface” of this bottom, third depth. So it means that this wave form, at this depth, is in the emotional part (top portion of the bottom third). So if the emotional range of a certain depth contains a Floating pulse, it means that this emotion is active but does not have enough yin energy or capacity to sustain itself; so it is an emotion that is transient or related to a past event, unless the patient’s body or mind reinforces or reiterates it.

Another example, if you look at the organic depth of the lung pulse and it shows a strong Floating pulse, it indicates that lung itself has an inflammatory condition and is drying up. In

this case, since it is carrying heat, how can we say that the lung is drying? It is because you are looking at the yang or heat attacking the metal position. So yang or heat in the metal element will ultimately cause dryness. But if you found the Floating pulse in the organic level of the spleen pulse, it will most likely indicate an infectious mucus condition. So the condition that a Floating pulse is expressing will change depending on in which position it is found and at which depth or sector in that position.

An important point to consider in the Dong Han system is that you should not try to limit your thinking solely to the pathogenic factors attacking the body; the pathogenic factor, in itself, is not the primary matter. What is important is how the body responds to that pathogenic factor and the resources the body brings to bear. This is the real matter; more so than the pathogen itself. As much as we talk about the body's dynamic balance, which is the state of its health, we tend to forget that the body is reacting to something. When we treat we forget about the body's own resources and think solely about a pathogen (*xie qi*), we miss the underlying exposure and reason for the disease.

For instance, if you see a Floating pulse in the gall bladder's blood depth, the first thing to recognize is that the yang energy is increasing without enough yin substance. It can indicate that the gall bladder is trying to release the bile but there is not enough bile in it. So most likely it will cause the physical contraction of the gall bladder, but many other things could also be possible—headaches, lightheadedness, or the gall bladder may have been removed, etc. But all of the symptoms will relate to the fact that the gall bladder does not have enough yin substance to balance the increasing yang.

In cases where a person does not have a gall bladder but the gall bladder position has this pulse, you might consider that this might cause the headache; but you have to follow up that presumption and examine the energy from the gall bladder to see if it actually goes beyond the distal, beyond the neck, and affects the upper part of the gall bladder sectors. In this case, the missing gall bladder could cause headaches because of the hyperactivity due to the missing gall bladder.

In another example, if the heart pulse is like that in the organic depth, it means that the heart is receiving more stress, and it is trying to pump a little harder in response but it is not necessarily doing a good job. In order to find out why the heart is not doing a good job you may have to check the other 11 pulse positions using the 9-Sector method found in *Suwen* Chapter 20 to find out. If there is a Floating pulse in the Sanjiao at the organic depth, it indicates that the nervous system is overactive and the nerves cannot take that stress well; so the nerve capacity is very low.

Sunken Pulse

Sunken Pulse (*chen mai*): A pulse that is distinct only at the deep level. A sunken pulse is associated essentially with interior patterns, although the exterior patterns of external diseases may temporarily present with a tight sunken pulse when the body's yang qi is obstructed. iii

In the classical literature a Sunken pulse is described as touching a worn out cotton ball. The pulse becomes stronger when pressed, resonating all the way down to the bone; but when the pressure is lifted, it disappears again. It is usually associated with cold energy in the deeper parts of the body or a specific organ, depending on the position.

In this case, when you press deep you will find a pulsation; but when you lift the fingers, the extension of the pulse does not follow them. The pulse is felt only at the deeper level. Remember that you have to adjust this definition to different body types, and the amount of flesh that they carry. So compare the depth relative to the patient. At the same time you have to remember that more obese people have a greater tendency to show yin types of pulsation due to their metabolism, but that is not the sole determining factor in treatment of disease.

Sunken and weak indicates depletion of yang.

Sunken and rapid indicates internal heat.

Sunken and slow indicates internal cold.

Sunken and strong indicates an accumulation of cold.

Sunken and slippery can indicate internal mucus.

When the pulse is Sunken it indicates an illness of the internal organs. Using the concept of the 3-Depths, the activity shown in the Sunken pulse motion is an activity of the internal organs and not necessarily expressed as a syndrome. It usually manifests as a chronic conditions of the organs. When you look at the Sunken pulse make sure you are distinguishing the yang syndrome and the yin syndrome. In this yin, deep, organ activity you can have both yin and yang syndromes. You can check this by the downbeat and upbeat, or heat and cold type of textures. Hard and rigid textures are more yin and flowing textures are more yang.

If a Sunken pulse is flowing and vibrant, it has yang qualities; but if it is tight and Wiry it is has yin qualities. This is only a general rule, because if you feel a Wiry pulse you have to see if it is vibrant or solid. If it Wiry and vibrant, it could still be yang.

When it is a yin syndrome, it indicates that it is internal and cold. So the temperature of the body will be relatively lower. If it is a yin syndrome their fingers and toes will be cold. If the yin syndrome becomes settled it may cause intestinal spasms or cramping and aching of the muscles and nerves—which will be thin but tight like a wire. So it will be slow, thin, weak, but with tension in it.

If a Distal pulse is Sunken it indicates aching or a tight achy congestion in the chest. They may also have mucus in the bronchial area or water retention in the chest. Because of the cold, tightness, and mucus they will have difficulty in breathing or not be able to breathe deeply. Many times, a Sunken pulse in the Right Distal location can indicate chronic inflammation of the lung or diaphragm, or mucus and water retention in the lower part of the lung.

If the Middle position is Sunken, it indicates that the digestive system is becoming very cold because not enough blood and heat is circulating there. These patients have a tendency to have indigestion, stomachache, bloating, and diarrhea since they cannot digest the food in the stomach.

If the Proximal position becomes Sunken, it indicates lower backache, frequent urination, vaginal discharge, incontinence of urine, diarrhea or lower back pain due to kidney depletion, and sweating around the genitals. This applies more to the kidney location.

If the kidney pulse is Sunken and very thin, it indicates that the water phase is not getting activated or mixing with yang. Yin is becoming more yin and isolated. When the kidney is weak, it will require more water consumption and will, in turn, affect the bladder. It will lead to hardening of the kidney. It can also indicate lack of jing or low hormones. At the same time, you have to see where this kidney syndrome is coming from in order to get a clearly detailed view of the situation. Many times it comes from the liver.

If the liver cannot deal with all the toxins, that stress will be sent to the kidney. As far as the control of toxins in the body, the liver takes care of the toxins related to the blood chemistry; the lung takes care of all the energized toxins; the large intestine removes metabolic waste and toxins because it is a gross type of filtration; and the kidney takes care of strong chemical toxins which are heavier than the ones taken care of by the liver. So if liver is overburdened, it will send it to kidney.

While doing that, the liver will usually first send that stress to the muscles around the kidney, so the lumbar muscles will tighten. If there is more a muscle pain than kidney pain, it means that the liver is throwing it out to the kidney. On the other hand, if the kidney pulse alone is very tight and muscles around it are loose, then it is solely a kidney problem without any affect from the liver. When you look at the pulse, even before palpating the back, you can clearly see the pattern.

Dong Han Commentary

Just as in the case of the Floating pulse, we must look at this type of pulse from two distinct perspectives: physical position and energy quality. Classically, any movement found deeper, at the organ depth, or near the bone, is considered Sunken simply due to its location. But we must also examine each pulse quality in any of the 9- or 27-Sectors, and determine its energetic quality. Sinking (to distinguish it from the classical term), just like Floating pulse, can be found at any of depth and in any position. A Sinking pulse is the opposite of the Floating pulse: the downbeat part of this pulse is much more emphasized than the upbeat; often, the pulse will start with a downward movement. It basically does not express, react, communicate, or respond to yang. This last concept is by far much more important than any other description of the Sinking pulse.

Again do not be confused by the classical terminology. From our perspective, just because you are examining deep positions does not mean that you are necessarily picking out a Sinking pulse there. Any of the 27 basic pulses discussed by Li Shi Zhen can be found in any position or sector. In the Dong Han system, it is the geometrical shape of the pulse quality that determines its energy character and not the depth of your finger pressure. A Sinking pulse indicates that the sector you find it in does not have a yang output. A Hiding pulse is an extreme of the sinking pulse, since it is felt at the bone level.

Slow Pulse

Slow pulse (chi mai): A pulse that has three or less beats per respiration. The slow pulse is principally associated with cold and with yang vacuity. It may occur in any disease involving insufficiency of yang qi or obstruction of qi dynamic, such

as cold, phlegm turbidity, and static blood. Occurring during pregnancy, this pulse signifies uterine vacuity cold or insecurity of fetal qi. iii

Since this pulse is slower than the Normal Pulse it will have three or less beats per breath. In general, the main characteristic of this pulse shape is cold as opposed to heat. It indicates depletion of yang, cold energy syndromes, or excess of yin in comparison to yang. The qi and blood circulation is scarce and slowed down due either to depletion or the stagnating affect of cold qi. These patients are usually weak, anemic, and do not show strong pain.

A Slow pulse which is Floating indicates superficial perverse cold energy.

A Slow and Sunken pulse indicates internal perverse cold energy.

If the Slow pulse is weak it indicates that the depletion of yang is causing the cold condition.

If the Slow pulse is strong it could indicate internal accumulation of cold causing pain.

If a Slow pulse is found in the distal positions, it indicates that perverse cold energy is accumulating in the chest and heart areas.

If a Slow pulse is found in the middle position it indicates that perverse cold is damaging the spleen and stomach.

If a Slow pulse is felt at the Proximal position it can indicate a depletion of kidney yang, causing heaviness or pain in the legs, incontinence of urine, or scrotal hernia.

Dong Han Commentary

The essential thing that we should not forget is that a Slow pulse beats less than four beats per breath; we must not forget to compare the patient's pulse rate to their breathing. We have a term Huan mai meaning a moderate pulse (sometimes used as a synonym for Normal); so the moderate beat of the pulse is four beats per breath. Do not say that someone's pulse is fast or slow until you have compared it to their own breath. The ratio of pulse-to-breath is related to the universal and earthly energies. During a Slow pulse, the qi thrust is lagging behind.

The pulse terms of Slow and Rapid are very similar to terms Rushing and Delayed; and for all practical matters often seem to have the same meaning. So, are there two definitions of Slow? We can distinguish these definitions by saying that Slow is system-wide and that all the pulse beats less than four beats per breath. In a Delayed pulse, while all the other beats are going at the same pace, one pulse position or sector does not reach its limit yet; so it does not arrive at the same time. It can be called Retarded, Delayed or Late—all of these terms indicate the same thing.

Actually the term Delayed pulse is more often meaningful in clinical situations than the Slow pulse that describes the ratio of beats per breath. When the pulse is Delayed, a certain area does not receive the qi flow fast enough—since the whole body is pulsating with one speed but one sector is delayed. When a movement in a given sector is being Delayed, it means that the energy thrust is being delayed, not that the heart is beating differently for that one area. It is only that the energy thrust there is catching up with a delayed motion.

So whenever you pick out a Delayed pulse in any of the positions or in any sectors, it indicates that there is yin energy, xue, or jing, but the qi does not arrive with it at the same moment. One frequently found example is the delayed movement between the left proximal

and distal, making the kidney and heart out of synchronization. This indicates that the mind and the body are out of synchronization. The patient's actions and feels are not coordinated.

A Fast pulse is a pulse that comes more than 4 beats per breath. But a more important definition is the Rushing pulse, which means that while all the pulses beat at the same time, there in a certain sector or a vibration seems to come ahead of the general pulse wave. This indicates that the qi is arriving but not the blood. The two different types of Delayed and Rushing pulse can actually cause very similar syndromes. The thing is that if a certain motion whether it is Delayed or Rushing, continuous for a while, it is difficult to decide whether originally it was Delayed or Rushing. In terms of syndromes, you can see that in certain sectors there is qi but no blood or blood but no qi. Since they are not flowing together, the question arises whether the situation started with the qi being slow or the blood being slow. Since the flow of qi and blood are out of synch, a question arises as to which goes first the qi or the blood. When you examine the pulse and compare all the positions and sectors, the answer should become evident.

It is either Rushing or Delayed so that you can tell precisely which is which. As far as the Rushing pulse is concerned, because of the characteristics of the qi arriving there too fast, it gives more chance for the qi to rise upward or this qi related functions such as the emotional and the mental function to respond faster than the physiology. So many times it could be some mental problem indicating a hyperactivity of the central nervous system. The Delayed pulses can be totally opposite, but instead of that the syndromes will be more concentrated around the yin energy arriving there first, so the problems will be more of the swelling type or retention of physical material, fatty, jing, etc.; but there will be a lack of function. So all the building blocks are ready but there is no function to utilize them. For example, they are getting bigger or fat, but not actually getting strong.

In comparison to Floating and Sinking pulses, the Slow and Rapid pulses are more related to speed of the function and material and which arrives first; while the Floating and Sinking pulses are primarily concerned with the amount of function or material and which is lacking.

One thing you really have to clearly understand in case of the Delayed pulse is that even though it keeps coming the whole thing is delayed, so when it comes it does not catch up but is always Delayed. If there is a Delayed pulse in the stomach, the function of the stomach keeps on coming late. So when they swallow food the stomach can secrete acid, but it will not be effectively digested. If you find the Delayed pulse from the stomach, the stomach is not churning but the acid, controlled by the qi movement, is being secreted. All the preparations are there, the acid is being released, but the yang or functional activity does not create this movement. Again remember this if the pulse is delayed when you check it means that that action or material is not there, we are expecting it come but it is still not there. It is like having all the building materials available but no workmen to put them together.

For example, a Rushing pulse in the stomach can be caused by poor blood circulation to the stomach, their body temperature, or emotional condition. If for instance they eat something cold and the stomach contracts, the circulation is cut off and it does not move. There can be a qi element but no physical flow anymore. So while we have made a few examples, they are not perfect since we are only describing one sector and you cannot really tell what is happening just by analyzing one sector in isolation. In order to clearly diagnose you have to look at the

interaction of other sectors. What we have described is only one of the many possibilities. When the pulse is Rushing it is the qi reaching and not the blood, when the pulse is Delayed it is the blood reaching the sector and not the qi.

A question can arise, when the pulse is Rushing why it could not be that the blood is arriving and not the qi? The answer is that it is an arterial pulsation; it is the qi expression through the yin pulsation. So it is the qi coming first, even though you are picking it up on the artery. If you found a Delaying pulse in the liver, meaning that the material is there but not the qi, it can indicate that toxins are accumulating in the liver—even when there are no symptoms yet. There may be general tiredness because the liver qi hasn't arrived on time, and it can also be related with blood and the toxic garbage that all the other organs throw out so they are accumulated but somehow not yet processed. So they are not moving in any direction but somehow getting stagnant.

Rapid Pulse

Rapid pulse (shuo mai): A pulse that has six beats per respiration is a rapid pulse; one having between five and six beats is termed a slightly rapid pulse. The rapid pulse is usually quite smooth-flowing, so it is often confused with a slippery pulse. However, the term "rapid" refers exclusively to the pace, whereas "slippery" denotes a quality. The *Bin-Hu Sphygmology* (Bin hu mai xue) clearly points out, "Rapid and slippery should not be considered as being the same; rapid refers to the pace only." The rapid pulse is associated with heat, but may sometimes be an indication of vacuity. A forceful rapid pulse indicates repletion heat and is most commonly seen in externally contracted heat (febrile) disease. A forceless fine rapid pulse indicates yin vacuity fire effulgence and is generally seen in depletion patterns, such as are described in Western medicine as pulmonary tuberculosis. A forceless large rapid pulse generally indicates qi vacuity. Most healthy infants have rapid pulses, and a slippery rapid pulse is a normal sign in pregnancy. iii

The term Rapid refers to a system-wide finding in which the patient shows six beats per breath. The primary quality of this pulse indicates a condition of excess heat as opposed to cold. If the pulsation is rapid and strong it indicates heat and fever. If it is rapid and weak, it usually indicates a mental or emotional disturbance. If the pulse is Rapid and Floating, then it indicates heat on the surface of the body. If it is Rapid and Sunken, then heat is in the internal organs. If the pulse is Rapid and powerless, it is due to fever without inflammation. If Rapid pulse has strength it most likely indicates temperature, and it is excessive perverse heat. If the Rapid pulse is weak, which means there is no resistance to pressure, temperature is caused by depletion; usually a case of false fire.

The term Rapid movement refers to the pulses as a whole; while the term Rushing is used for a single position or sector of a position. So if the Distal position is faster than others or has the Rushing qualities, then it indicates that there is heat in the lung or the pericardium and that heat is stagnating there. This will usually indicate that mucus is developing in the bronchial area; difficulty breathing, dryness of nose and sinus. If the Middle position is Rushing, it

indicates that heat is entering the stomach. The patient will show constant thirst, lack of appetite, cramping of intestines, difficulty with urination and bowel movement.

If the left proximal pulse position is Rushing, then heat is being retained in the lower warmer. It indicates bladder or large intestine difficulty. In case of the bladder, they will have trouble holding the bladder and the urine will be red in color. In this case, we see the Proximal position representing the lower warmer and is not really related to the large intestine directly. This inflammatory problem can affect the whole lower warmer, including the kidneys, bladder, and large intestine. All you will be able to detect from this finding of the Proximal position is the general inflammatory situation; while the real details of large intestine response to it will be shown in the Right Distal position.

Rapid pulse in the Left Distal indicates heart fire attacking upwards. Symptoms include sore throat with cracked or ulcerated tongue.

Rapid pulse in the Right Distal position indicates dry heat in the lung. Symptoms include coughing and vomiting of bloody pus.

Rapid pulse in the Left Middle position indicates liver fire ascending upwards.

Rapid pulse in the Right Middle position indicates internal heat caused by stomach fire.

Rapid pulse at the Proximal position indicates that fire is ascending upwards from the lower burner. Treatment is to nourish the yin and depress the fire.

Slippery Pulse

Slippery pulse (hua mai): A smooth-flowing pulse classically described as “pearls rolling in a dish” or “small fish swimming.” A slippery pulse is commonly seen in pregnancy, particularly in the early stages where extra blood is needed to nourish the fetus. It is also sometimes seen in healthy people, indicating an abundance of qi and blood. Phlegm-rheum patterns and food accumulation may also be characterized by a slippery pulse. iii

A Slippery pulse found system-wide is usually indicative of excess of qi in the body. This quality feels like the finger is slipping on a glass bead or the smoothness of oil between your fingers. When you press, it is like pressing glass beads into a carpet; they sort of go underneath without disappearing. It is a yang quality indicative of heat and fever. It does not necessarily indicate that the mucus is stagnating and forming blockages but rather that the body is in the process of secreting it.

In women, if the beads of this pulse are found in both Proximal positions and seem connected, it can mean that menstruation is irregular. In older women, it can imply menopause. If the pulsations appears in both the Right and Left Proximal locations together, they can indicate pregnancy and reflect the state of the uterus.

If the Distal position becomes Slippery it indicates that mucus congests in the chest that prevents the heart yang and lung qi from descending, vomiting, acid regurgitation, stiff tongue, and coughing.

If the Middle position becomes Slippery it means that liver heat is blocking the spleen and causing indigestion.

If the Proximal position is Slippery it indicates the presence of damp heat in the kidney, bladder, small or large intestine causing triple parching, dysentery, hernia or dysuria.

Dong Han Commentary

When the pulse is Slippery the first thing you know is that the yang energy condition is becoming overly active. It sometimes also indicates that moisture, especially mucus secretion, is excessive. So when the pulse is Slippery, first two important things that you should think of is that there might be some activity with the heat and, secondly, you have to ask yourself if the heat is caused just by the qi or also the xue as well. The quality of the Slippery pulse often indicates localized excessive heat when it is in one position or in a sector of a position. In this case, it can indicate excessive localized mucus production. It will manifest when the source qi is unable to hold kidney fire, causing heat at the blood level.

Any Slippery and Empty pulse indicates a blood involved condition. If you find a Slippery with an Empty pulse in the deep area of the kidney position, it definitely is a uterus related condition. If a Slippery pulse is shown on the Mingmen or kidney it can indicate strong blood coagulation causing menstrual irregularity or amenorrhea. If the Slippery pulse is entering toward the heart, it might not only be the mucus, it can also be a blood related condition; it can even be a blood clot.

When you see a Slippery pulse entering the heart, it can indicate erratic blood flow, a heart problem involving arterial tightening, or even a blood clot. If it is a heart motion problem you can check with the liver pulse to see if the thrust of the qi going from the liver to the heart is normal or not. If you are wondering if it is a clotting problem, then you can check the spleen relation to the heart. If you are wondering if it is an arterial condition or tightening of the tissue around the heart you must also check the energy connection from the spleen and liver.

Choppy Pulse

Rough pulse (se mai): A pulse opposite to the slippery pulse, i.e., one that does not flow smoothly and that is classically described as “a knife scraping bamboo.” The rough pulse is sometimes termed a choppy or dry pulse in English. It tends to be somewhat fine, is generally slightly slower than the normal pulse, and has been described as being “fine, slow, short, dry, and beating with difficulty.” The rough pulse is often seen in blood stasis patterns and dual vacuity of blood and qi. iii

Classically it was described like cutting bamboo with a light or dull knife—uneven and rough. It can also be compared to touching sandpaper or wet sand. It is also described as slow, thin, slender and rough, as if the circulation was obstructed or suspended for a brief moment and then resumed again. In general, it indicates a relative abundance of energy and scarceness of blood. This pulse quality results from stagnation or damage to body fluids (jin ye); or depletion of ying or blood.

Dong Han Commentary

This is a very general term, and almost anything that is neither Soft nor Slippery may be considered as a Choppy pulse as long as it does not have the smooth type of a texture of the Slippery pulse. It can even feel like very fine sandpaper. A Choppy (also Sandy, Rough, or Fine) pulse is a yin pulse indicating a cold syndrome; the rougher it gets, the colder it is. It is usually found as a cold syndrome in the deeper area of the body, indicating a circulatory imbalance or poor blood circulation.

If found in the Right Middle position, you can think of it as middle warmer becoming colder, causing stomach and digestive disorders such as diarrhea, cramps, indigestion, etc. Or it may indicate a depletion of the spleen and the stomach, causing the qi to stagnate on both sides of the rib cage causing fullness and swelling. So there is an obvious stomach problem related to the digestive function. It usually indicates stomach cramps. If you detect Choppy pulse deeper in the stomach location, then it is definitely stomach cramps because cold energy is penetrating deeper into the blood or organ depth.

If the Right Distal pulse is Choppy, it indicates their respiratory system is cold and you can suspect that they are retaining fluids in the lungs. It could also be blood retained in the lungs without causing any type of inflammation. If the Left distal position becomes Sandy it means that damaged heart blood is causing chest pain.

If the Proximal position is Choppy, it indicates that the lower jiao is cold and depleted of yang. If the Proximal position becomes Sandy it indicates that damage to jing and blood in the lower warmer resulting in knotting of the intestines, constipation, dribbling of urine, intestinal wind, or causing bleeding in the lower jiao. Because the bladder is Taiyang and already associated to cold energy, it is especially susceptible. If a Choppy pulse is especially pronounced in the kidney area, it can indicate kidney pain or lower back pain. If it is found deeper down, it can be a cold type of ache around the knee joints. In men's cases, they may have lower back problems and erection problems. In women's case, it will cause bladder difficulties so they may not be able to hold their bladder. If this pulse is found in both the Left Proximal (Kidney) and Right Proximal (Sanjiao) positions, it indicates yang qi depletion related to the reproductive organs.

Any kind of Choppy pulse indicates blood circulation problems, so if you see it as chronic and located in the blood or organ depths, you have to suspect anemia. If Choppy pulse is Floating, it indicates cold is on the surface; if it is Sunken or Sinking it indicates internal cold.

If Choppy pulse is excessive it indicates a strong circulatory blockage; if it is deficient then it indicates vital heat is depleted. This cold Choppy pulse is much more difficult to pick out than the pulse associated with heat. It can have a very delicate or sandy quality. Sometime when you palpate you cannot be really sure if that Sandy quality is really there; at first it will feel really Sandy but if you try to verify again and again you cannot be really certain since it is Sandy but at the same time very soft.

If you see a pulse showing a Sandy texture like rough sandpaper, it usually indicates heat when it is that rough. It may also have a very thin, vibrant, or Sandy sensation all through the pulse wave. If the tips of the pulse waves are not sharp like teeth of the saw but rather more flat or rectangular, this pulse is also very dry and is lacking any sensation of slipperiness or moisture. So when you find the Sandy pulse the first thing that you will decide is whether the pulse indicates that the patient is lacking jing, xue, or body fluids. When it does not contain

enough yang energy, it indicates heat depletion, so it is a cold condition; but the most important part when it is also thin or vibrating is that it is dry. So a Sandy pulse indicates lacks jing. And because jing is lacking, blood will be lacking as well. If there is blood depletion, their body will feel cold.

If for example you have found a Sandy pulse in the spleen it would indicate that the spleen is not supplying moisture, so the body is drying up and that might express itself in the skin, organs, body parts, or sensory organs. If the Sandy pulse shows in the liver, there could be some fire symptoms, since the wood phase of liver, by losing the moisture, and then dries up and accelerates the creative (*sheng*) cycle; turning into fire and becoming heat.

If you find a Sandy pulse in the kidney it is a common indicator that the filtration function is weakening; kidney failure may be occurring. The odd thing is that when the kidney pulse is Sandy and dry at the same time, the body becomes more watery. The patient will have edema from kidney failure. You will see some cancer patients who are undergoing chemotherapy, and many times you will see a very dry, Sandy pulse moving from the Proximal to the Distal positions. It will feel like a vibratory quality, not slippery but sandy. When it is really light it is just in the kidney, but when it is strong enough it will travel all the way to the Distal position so it can affect the other organs or body as a whole. Water filtration is a kidney yang function. Sandy pulse is a depletion of yang. So it is cold and it looks like it is lacking jing and at the same time it is going dry, so it is a little more subtle, five elemental type of analysis. The most important part is that it is dry, but it started due to lack of yang then it dried up and now it lacks the jing.

If this kind of pulse is felt at the Endocrine level of the pulse (the line between the organ or adapted depth and the blood depth), it is the endocrine system drying up. By the time they manifest this pulse they are already show swelling from edema and the kidney is failing. If you have any patients in dialysis, there should be this kind of Sandy shakiness.

Wiry Pulse

Stringlike Pulse (*xian mai*): A long taut pulse that feels like a string of a musical instrument. It is sometimes called a Wiry or bowstring pulse in English. The stringlike pulse is associated with diseases of the liver and gallbladder, and in particular with ascendant hyperactivity of liver yang. It is also associated with pain and with phlegm-rheum patterns. It may be commonly seen in diseases classified by Western medicine as hypertension, arteriosclerosis, chronic bronchitis, and in diseases characterized by severe pain. The stringlike pulse is generally strong; if forceless, it is termed a vacuous stringlike pulse, indicating vacuity of yin and hyperactivity of yang. iii

When you press the String or Wiry pulse it feels very long and taut like the string of a bow, not showing any wavelike sensation; but when you release the pressure, the pulsation disappears. It mainly indicates the symptoms associated with the absorption and storage of energy; that is with yin and yang qi concentrating in a certain area and not dispersing. This pulse often indicates fatigue or complete exhaustion. It can also show very acute and severe

pain. It can also show hot and cold energy separation; usually internal cold and external heat as in malaria. Although you usually find this pulse on the liver, it is serious if it can be found in any pulse position. When you see this pulse you know that the liver energy is stagnated and becoming more concentrated, so you have to tonify the spleen and stomach. This pulse shows strong yang energy movement which causes isolation of qi and blood.

This pulse is one of the more serious indications of disease because it typically appears in the liver position, and the liver controls the spleen and stomach in 5-Phases. If spleen and stomach are damaged, all the other organs will consequently become injured. This is due to the central importance of the Earth phase. Classically in the circulation of branches, each phase becomes Earth before transforming into the next phase; and the simple yin/yang definition of a Normal pulse for each organ is the same as the element of the position (Wiry, Hooked, Hair, and Stone according to Li Shi-zhen) with support from the stomach qi. As soon as you see a Wiry pulse movement you must first stop the spread of problems to the other organs.

In cases of the separation of yin and yang, as in malaria, this pulsation may also be present. It can also accompany fatigue and extreme exhaustion as well as acute and very severe pain.

A rapid Wiry pulse can indicate excessive heat. A slow Wiry pulse can indicate excessive cold. A Wiry Floating pulse indicates a phlegm disease. Symptoms include dyspnea, coughing, stuffiness in the chest, slight edema and blackish skin.

A Wiry Left Distal pulse indicates headache and is also called a yang Wiry pulse. It can be associated with excessive conditions of the liver like stroke.

Dong Han Commentary

When we say string-like it indicates a string of a bow, so it is a very tight pulse without any flaccidity; thin and long. When you lessen the pressure, the pulse will feel like it is moving; but when you press it, it becomes tight and the moving sensation will disappear. It is almost like tension on a drum; when you touch it, it feels like it has a wave on it, but if you press it gets all tight. The primary characteristic of this pulse is absorption, storage, and stagnation of qi. In relation to this pulse there is a general inward direction of the qi movement. Sometimes we use Tense, Tight, or Urgent as synonyms for Wiry depending on the context and qualities involved. An Urgent pulse is an extreme condition of Wiry movement which vibrates to the left and right, and feels as if it may break at any time.

It belongs to Shaoyang type of yang energy. The location of the heat or cold combining with this Wiry pulse is between skin surface and organ, so usually it is in the sinews, tendons, or connective tissues. For example, if such pulse is shown moving from liver to the heart or from spleen to the heart, then you can assume that the tightness is right on the diaphragm. So this pulse indicates the problem is not right on the surface or right in the middle, but rather in between showing problems associated with the connective tissues. If this pulse combines with any type of heat it can indicate inflammation of the connective tissues.

Another interpretation for the tension is the isolation of qi and blood. In that category of organ qi and blood are not harmonizing, and they are separating, and that is why tension is forming. A Green Onion Stalk or Hollow pulse can be sometimes Wiry, so when you think of the Wiry pulse, do not think that it is always thin. It can also be large or full but you will pick

up the tension on the surface of the pulse. And when you pick out the tension on the surface and the inside of the pulse is empty, it means there is a strong imbalance between qi and blood.

When we feel this pulse, it feels like putting your finger on a tight guitar string. It vibrates, but is tight and tense at the same time. Sometimes it is so tense that it feels like it may break. When a pulse shows such tense motion it indicates such urgency of energy movement. If we think of the normal energy as a comparatively thicker and more moderate flow, this tense condition will be trying to simultaneously satisfy the needs of the position with very little real energy flow. So, consequently, it seems very anxious and very rushing; but it is in this mode because it also indicates depletion. So even though it is tense it does not mean that it is yang. At first, you might want to look at it that way because it is a seemingly strong, active pulse influencing other organs, but in reality it is also a deficient pulse. In that sense, the analysis of the Urgent pulse becomes a little different. It indicates depletion with an abrupt or anxious mode of energy flow.

We can divide this pulse into four subtypes of Wiry pulses according to where in the pulse wave we find it: the tightness being in the Front, in the Back, in the upbeat, or in the downbeat. This tension will indicate different things in the context of where in the wave and in which organ it is found. If you felt this pulse in the Sanjiao or various depths related to the nervous system, it would indicate nervous tension. In the case of the Sanjiao, you would have to check further to see if is happening because the Sanjiao is too weak to take more stress, or because that stress is the product of another organ. If it is coming from another organ it might be an excessive condition, but if you cannot find any stress from other organs coming towards the Sanjiao, then most likely that tension is caused by the exhaustion of the nervous system. Consequently, it is highly sensitive to any kind of stimulation. In the other case, if the Sanjiao is sending this stress elsewhere, it could be related to some kind of mental or emotional response. Wiry pulses in depths related to the nervous system can indicate nervous tension in the musculature, connective tissue, or internal organs.

If the Wiry sensation can be felt in the down beat or the upbeat, it can indicate yin or yang, upper or lower part of the body, internal or external aspects. If the upbeat of a pulse is tense while the downbeat is normal then it indicates that their yang energy is tense, while the yin energy is not tense yet. So they will outwardly express that tension in some behavior or emotion. It may create an environment for another organ's problems but it may not show any activity itself; basically the qi activity is tense but the material or jing activity is still fairly balanced. If it the other way around, then the originating organ does not influence or create a problem environment for another organ, but is more sensitive to being influenced by activity outside itself.

While a Wiry pulse is often associated with wind, it is not, in itself, wind. It is just very urgent and very desperate in its action to continue its function when it is depleted. It is not necessarily a wind movement because it can start from other organs, such as the heart or the kidney. When you see this activity, you can find wind syndromes accompanying it. If a pulse is very strongly Wiry or Urgent, the organ is almost excessively working out of proportion to its capacity, and is very sensitive to any stress. If the liver pulse shows a Wiry pulse then it does not have a healthy energy anymore and is struggling to keep its balance. When it becomes Urgent, then it is highly sensitive to wind or any stimulation. And because it is so sensitive to its

own element, all other organs directly connecting to it start to become sensitive at the same time. When you find this pulse and you find a saw tooth texture in it, this indicates that the heat is causing the condition. If those teeth become more pronounced—larger or thicker—it means that the condition is becoming more deeply established.

So with many wind syndromes you will find this type of pulse because wind is moving due to the depletion and sensitivity of the affected element. If the Wiry pulse is found in the heart, the heart will be tense, deficient, and will not smoothly pump since there is not enough capacity. As a result, the heart will tighten and palpitate faster. If both distal positions have a Wiry pulse, it can indicate an accumulation of mucus in the chest and diaphragm which can cause headaches.

If the Left Middle position has a Wiry pulse it indicates alternating hot and cold syndromes.

If the Right Middle position shows a Wiry pulse it indicates that perverse cold is accumulating in the stomach and spleen causing pain in the abdomen.

If both Proximal positions show a Wiry pulse it indicates a condition of depletion and cold in the liver and the kidney causing a hernia, with pain in the testicles pulling to the lower abdomen and cramping of both legs.

Large, Small, Long, and Short Pulses

The Large pulse is in reference to the vertical dimension; it peaks high and sinks lower. When you divide this pulse into three layers, the middle layer occupies a proportionally larger space than the upper layer. Therefore the blood or organic range becomes wider, meaning that the corresponding organ's capacity is greater. In general, it indicates that the organic energy is abundant. So basically it can be a healthy pulse showing *zheng qi*. It is often considered the typical pulse in the spleen and the stomach. Large also means that it is easily "visible" to other organs; which means that the Large pulse is influencing other organs in some way. But even when the Large pulse shows immediate activity, it can be a very temporary type of activity. Many times when you treat syndromes it might change into this type of mode. Or if certain condition or abnormal activity is in the Large kind of shape, it is not going to last long, but currently it can be an affecting problem throughout the whole body.

If pulse is influenced by other organs that are carrying some perverse (*xie*) energy, it will indicate a yang excessive syndrome that is expanding deeper or more superficially. If you see such a pulse in the Distal position and if it is also supported by the Middle position, this indicates that this pulse wave is getting longer and longer in the yang direction—from Proximal to Distal—at each location. It can indicate that the person is very excitable, and their energy tends to rise to the upper warmer.

This pulse often indicates Yangming heat growing upwards. So it is a strong type of heat. It could also indicate the presence of toxic yang energies. When you see this shape, watch out for Sanjiao heat buildup since the patient might be lacking jing or blood. If a Large pulse is rapid at the same time it indicates excessive heat in the triple warmer or wind and heat in the position. If the pulse is Large and slow, it indicates it indicates a normalizing or recovery of health.

If the pulse strongly extends toward the Left Distal position (in this case it will be both Large and Long—strong both vertically and horizontally) and it has a vibration or shakiness in

it which is a bit stronger than the Sandy texture, then it will indicate a problem with the pericardium. If there is a shakiness in it that has an inherent tendency to break down while the Large pulse is developing towards the Distal position, it could indicate a valve problem with the heart. These people may have a panic attacks. If this pulse is in the Left Distal position, the panic attack is not being created by an adrenal problem or a liver/gall bladder condition, but rather it is the heart valve area causing it—actually this is not uncommon pulse in cardiac patients. So when you see a patient with this kind of problem, try to see whether it is coming from the heart itself or from stress coming from the Right Proximal (Sanjiao) or Left Proximal (kidney) locations.

Another important thing to keep in mind when you see a Large pulse is that you should not always presume that it has excessive energy. Excessiveness, in actuality, has little to do with the size of the pulse. When you see Large pulses, pay close attention to see if it has enough pressure in it. If the pulse pushes back then it is a good sign, it has *zheng qi*. If it plays with you without giving up or disappearing, then it is an excessive pulse. And, if it disappears when you try to play with it because it is without support or does not have enough downbeat, it is definitely a depleted pulse.

In the case of the Small pulse, the vertical range of the pulse is shorter and consequently does not carry much capacity. In this case, the organ energy is not really extending its influence to either the superficial or the deeper layers. It can not easily influence other organs or parts of the system like the sensory organs or body parts associated with the organ. When the pulse is like this, the patient has a tendency for emotional or chronic problems to prevail.

Large and Small refer to the vertical dimension of the wave, indicating the amount of qi available at a given moment and, at the same time, the depth of the affect of that qi. Long and Short refer to the horizontal dimension. In general, Large and Long pulses indicate that the qi flow is greater than the blood flow; while Small and Short pulses indicate that the blood flow is greater than the qi flow. You must consider both qi/yang and blood/yin dimensions together.

Large and Long are yang in comparison to Short and Small. Large and Small generally indicate qi or yang qualities, while Long and Short indicate blood or yin qualities. So a Large pulse is yang of yang, a Small pulse is yin of yang, a Long pulse is yang of yin, and Short pulse is yin of yin. The aspect of the pulse wave that is going up and down indicates the activity or expression of the organic activity of the position; the width of the pulse wave indicates what kind of capacity that wave form has. You can compare the up and down movement to voltage and the width to wattage. The width decides how much capacity and strength the pulse is carrying.

In general, if the pulse movement is Large and Long it means that the output is very strong; but if it is Large and Short it means that the strength of the output is less but the movement still has the capacity to last for a longer period of time. Look at the ratio between the width and the height as a triangle. The greater the area of that triangle, the greater the capacity to express its energy or do damage. Conversely, if you see a pulse which is wide but Short, it will have a small capacity to express its energy or do damage.

When the pulse is Short it means that it will not last long, since it does not have enough support to create that energy much longer. So endurance or capacity depends on the width. When you see the big fat pulses you know these will last longer. Pay more attention to this 3rd

dimension of the pulse than you do now. It will help train you to see this 3rd dimension in other pulses—Hollow, Knotting, 8-Extra, Yun Qi Method, 5-depth Cross-section, etc.

Scattered Pulse

The Scattered pulse is Floating but more diffused than an empty pulse and disappears when pressure is applied. At first, this pulse may feel Floating, thin, and wide; but when pressure is applied it scatters beneath the finger, not unlike an automobile windshield broken into small pieces. It is similar to the Soft pulsation, but the Soft pulse retains its shape under pressure. When pressed, this pulse may show many different energy patterns—in this way it is opposite to the uniformity and simplicity of the Normal pulse.

The primary characteristic of this pulse is depletion and damage of the source (*yuan*) qi. It does not have a regular beat and indicates that the energy—especially jing—is lost and the patient does not have a clear energy flow through the meridian system. It can develop after a serious hemorrhage or when an organ is about to fail—it is not a representative, elemental pulse shape of an organ. It is one of the classical death pulses.

If the Scattered pulse is found in the left Distal position, it indicates that heart yang depletion is causing palpitations.

If the Scattered pulse is found at the right Distal position, it indicates that wei qi is dispersed and the patient suffers from spontaneous perspiration.

If the Scattered pulse is found at the left Middle position, it indicates that the yang is unable to transform the yin; leading to accumulation of fluids.

If the Scattered pulse is felt at the right Middle position, it indicates that the spleen yang is deficient causing swelling and edema of the legs.

When the Proximal positions are Scattered, it indicates the presence of chronic disorders due to depletion of Yuan qi.

If the right Proximal is Scattered but also has a sensation of “sparkling or crystals in a clouds” it means that the nervous system is very weak and the patient is about to have a seizure.

Knotting Pulse

The definition and clinical application of this pulse in the Dong Han system develops from the classical literature but expands beyond it. The movement is described by Li shi zhen as one that misses a beat at irregular intervals. It is an irregular pulsation indicative of energy blockages and aggregation of yin such as seen in tumor, cancer, or blood clots. The Li shi zhen definition, while including the correct clinical significance, overlooks its shape in the width or z-dimension. A Normal pulse not only has full extension of length in the x-dimension and amplitude in the y-dimension but rotates clockwise in the z-dimension as it moves forward. A Knotting movement, on the other hand, rotates through the z-dimension but does not always move forward as it rotates. Actually it is this geometry that gives this pulse its sensation of intermittent quality.

Dong Han Commentary

Usually it feels like a stream swelling around a bridge pylon and when it rises to a certain point it seems to be cresting, flattening, or stopping. But while it is stopping or flattening at the top there is still some movement going on inside it. Sometimes when pulse rises at the top of its arch you can feel a vibration or spinning quality without any descending motion, like a small tornado on its side—in the Dong Han system we have nicknamed them “spinners.” This spinning quality indicates that the energy is concentrating and creating the blockage, and can be interpreted in several ways. If the movement knots irregularly, you can suspect a cyst or hematoma. But if it knots with each beat, you should suspect cancer.

The yin/yang interpretation is that it is an example of yang reaching its maximum and turning into yin. A second, 5-Phase, interpretation is that the strong ascending movement of the growth phase (wood) of the sine wave along with spinning quality without any descending motion is indicative of the increased metabolism of a growing mass of cells and the lack of control. The pulse indicates that there is some kind of blockage in the organism—a cyst, a tumor, internal hematoma, or cancer. If this finding cannot be corroborated by physical testing, then it indicates that the body is in the process of forming it.

It is a yin type of pulse, so usually it is found in the deeper layer of a position or lower jiao and forming some kind of mass; so when you see a patient with this kind of a pulse, you want to check the abdominal area and see if there is any tight feeling there.

If this pulse is found at a more superficial or emotional level, it could also indicate an emotional block. If it starts to pick up a Sinking quality, the emotional block is creating a physical blockage. If the pulse is found in the superficial area, especially in the lung or large intestine positions, it could indicate skin has become very dry and is blocking the communication between the skin and the atmosphere.

Substituting Pulse

Basically this defines a group consisting of three different types of waves: one that changes constantly, a small pulsation following the main beat, and an overlapping type.

The first type is a pulse that changes into different waves while being read—a different shape may be emphasized at different times. A Scattered pulse, on the other hand, will lose form under pressure. A pulse that changes its shape indicates that there are different activities going on in the same area at the same time. If, for example, if it is hot, then cold, then goes outward, and then inward repeatedly means that it is constantly cycling in a certain mode and it keeps moving around showing different syndromes all the time. This is the developing stage of a wild, fast energy attack that is hitting different directions constantly. It is a very acute condition with the energy entering strongly and the different elements of the corresponding organ reacting very sharply. Each time you see different activity being expressed that is the activity of that organ at that moment. The main thing is that it is changing constantly since it is not settled with one action. Eventually, after attacking all the different elements, it will settle as one 5-Phase triangle.

A Substituting pulse could also be a doubling or tripling layer on the main wave—either of these can indicate that there is some mass or growth happening. This growth could indicate the development of a cyst, tumor, or cancer in the associated position or sector. If it can not be

confirmed physically when you find this type of pulse, it means that the person is developing the problem. Remember that when you find a pulse resembling a cancer or tumor, it is not the cancer or tumor that you are finding, but rather the energetic activity of the cancer or tumor.

When a Substituting pulse is the type with a small beat following the regular beat, it usually indicates that the energy of the spleen is not adequately nourishing the problem organ. It may be irregular and not appear after every pulsation. It is a dangerous pulse indicating that the meridian or the organ energy is cut or drained. It is commonly seen in patients with spleen and pancreatic weakness. This pulse could also be associated with cancer, but it is not very likely unless the smaller pulse is identically copying the main wave. Cancer imitates the host cells of the organ; a tumor does not. Cysts show as an energy block, many times as a yin energy block; and if it shows as a yang energy block, it is infected.