## **PULSE IMAGES IN PRACTICE**

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#### Chinese Pulse Images in Practice

Taking the pulse is an opportunity for us to connect with the living, pulsing heart of our patients. The pulse is enormously delicate, and if we approach it with respect, can give much of the information we need for diagnosis and treatment. However, to make pulse diagnosis really relevant to clinical practice as a herbalist or an acupuncturist is a huge challenge.

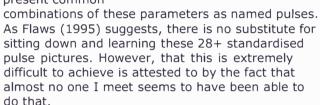
On the one hand we are challenged to bring into working consciousness our own intuitive information. For example, a practitioner may put their hand on the pulse and feel a physical or emotional feeling, or even may see an image. Such things can be fleeting, and we often miss or dismiss them. On the other hand, we are challenged to name the pulse in a consistent way that allows for communication and clarity of understanding. This consistency can be hard to achieve when we are presented with a rich but sometimes bewildering array of different approaches to pulse taking.

I first started developing the 3 Step System of Chinese Pulse Reading (Turner 2008) over 10 years ago as an aid to teaching the 28+ standardised pulse qualities that have agreed technical definitions and meanings within the contemporary discipline of Chinese medicine. These pulses are essentially in line with the work of Li Shi Zhen, a Ming Dynasty doctor whose pulse manual the Bin Hu Mai Xue or Lakeside Master's Study of the Pulse (Flaws 1998) could be read as his response to a similar problem of confusion when teaching pulses according to the Classics.



Li Shi Zhen (1518-1593)

I still find these 28+ pulses to be a useful starting point. They lay out the basic parameters of speed, regularity, depth, force and quality, and present common



The 3 Step System is essentially a step by step way of facilitating students to get to grips with the 28+ pulses. By being clear about the language used, explaining contradictions in translation (Turner 2004; 2007) and working practically to help students to feel and name individual pulses, what seems impossible becomes not only possible, but obvious. Over the past few years I have taught many workshops in the UK and Europe presenting the 3 Step System, and am always amazed at the amount of consistency that can be arrived at when the language we use is clear and agreed.\*

In the past few years of working with the pulse, there are two related aspects of pulse taking that have had a significant effect on my diagnosis in practice. It is these that I would like to explore further in this article. The first is the location of the pulse in terms of depth, and the second is an understanding of the *dong* (spinning bean/stirring) pulse.

# The location of the pulse in terms of depth

In terms of the classics, there is no consistency about the number of depths at which a pulse can be found. The depth between the surface of the wrist and the bone below the radial artery can be divided into two, three or five layers, depending on the classical source (Walsh and King 2008), and even eight layers can be used (Hammer 2001). The layer in which the pulse sits can be used as an indicator of the location of the *yang qi*. If a pulse is deep, the *yang qi* is either deep inside the body, or is in the lower part of the body. Equally if the pulse

is near the surface, the *yang qi* is either in the exterior or superior aspects of the body.

Two depths (superficial and deep) are often taken to correspond with internal-external organ pairings, with the superficial layer corresponding to the *yang* organs and the deep to the *yin*. Three layers (superficial, middle and deep) can be useful to read the six divisions or the four levels. In terms of six divisions, the superficial and middle layers correspond to the *yang* divisions (*taiyang*, *shaoyang*, *yangming*), and the deep to the *yin* divisions (*taiyin*, *jueyin*, *shaoyin*).

The depth location of the pulse is defined as the depth where the core of the pulse is first clearly encountered. For example, if the core of the pulse can be felt with only light pressure, that pulse is located in the superficial layer. If the palpating finger has to go 2/3 of the way down towards the bone, the pulse is located in the deep layer. Depth needs to be read as distinct from any other pulse quality such as force. We tend to assume that a deep pulse is forceless, but this is by no means always true, and the differentiation of these parameters is an essential part of the discipline of taking the pulse.

The location of the pulse in terms of depth is also distinct from the pulse quality fu (floating, superficial). According to the Mai Jing, the floating-fu pulse is defined as a pulse that becomes more feeble as more pressure is applied (Yang 1997:3). In practice there are three main ways that this can happen: (a) it simply becomes more forceless (b) it disappears completely or (c) it slides away from under the centre of the palpating finger while still being palpable on the sides of the finger. This pulse may be located in the superficial layer, but it may also be located in the middle layer.

I have found it helpful to work on the basis that one pulse is not generally read for different qualities at different depths, rather each pulse has a depth at which it is read. This is a stable starting point in a complex discipline, and from that point the occasional pulse that has distinctly different qualities at different depths can easily be distinguished.

Because the *cun* position reflects the upper *jiao*, the normal *cun* pulse tends to be located in the superficial layer, while the *guan* and *chi* pulses are normally relatively deeper. The *cun* position may or may not also be slightly floating.

Left hand	Cun	Guan	Chi	<del>-</del> - <u>-</u> - 1
Superficial				Taiyang Shaoyang
Middle			THE RESERVE TO SERVE THE PARTY OF THE PARTY	Yangming
Deep				
-:				– Taiyin Shaoyin

Fig 1 Normal pulse depths

It is easy to see that if the *guan* position is in the superficial level, while the *cun* and *chi* are deep, this indicates an abnormal situation.

Left hand	Cun	Guan	Chi
Superficial			
Middle			
Deep			

Fig 2 Guan pulse in the superficial layer

In this case it may be tempting to diagnose deficiency in the heart and kidney *shaoyin* because those positions are so deep. However, there is a finite amount of blood in the radial artery, and if it all accumulates in one position there is less left to fill the other positions. Consequently this picture may simply indicate an accumulation of *yang qi* in the middle *jiao*. If middle *jiao qi* stagnation is treated, it is likely that the pulses will even out, showing the problem to have been one of stagnation and accumulation rather than of deficiency. The pulse in this case is likely to be wiry (*xian*) or fine-wiry (*xi-xian*) and may or may not be floating (*fu*).

Left hand	Cun	Guan	Chi
Superficial		A transiens	
Middle			
Deep			gi galacini

Fig 3 Previous pulse after treatment for accumulation in the middle jiao

The depth-location of the pulse, in combination with its quality, can lead the practitioner directly to a corresponding family of formulas. In the above example, because the middle *jiao* pulse is in the superficial layer, then in terms of *zang-fu* organ pairings, gall-bladder is indicated, and in terms of six divisions it is *shaoyang*. This immediately leads us to *chai hu* formulas such as *si ni san*, *xiao chai hu tang* or their derivatives.

If, on the other hand, a fine-wiry pulse were palpated in the deep layer in the *guan* position, the patient's *qi* is in the *yin* divisions, indicating liver or *jueyin*. In this case *dang gui* formulas such as *dang gui huang qi jian zhong tang, dang gui shao yao tang, wen jing tang* or *dang gui si ni san* may be more effective.

For example, a female patient age 46 with a slim body and flushed face, presented in clinic with recurrent coughs and colds, exhaustion, a recent acute ear infection with blood and yellow pus that had been treated with antibiotics and was still exuding clear fluid, and a history of migraine headaches. She was also suffering from cystitis,

Jueyin

constipation and stress. Despite the infections, she tended to feel the cold badly, and with a four year old child had trouble sleeping. Her tongue was dull pale and slightly redder to the left of centre, with orangey sides and a thick dirty yellow coating at the left rear. Her left guan pulse was in the superficial layer, and was full with a wiry edge, while the left cun and chi were both deep. The right pulses were all fine, forceless and deep.

Right hand	Cun	Guan	Chi
Superficial			
Middle			
Deep -			
Left hand	Cun	Guan	Chi
Superficial			100000061
Middle			
Deep	Name and Address of the Owner, where the Owner, which is the Owner		

Fig 4 Initial pulses

Because of the full left *guan* pulse, the infections and the underlying cold, the initial formula was a variation on *chai hu gui zhi gan jiang tang* to harmonise the *shaoyang*, regulate the *ying* and *wei*, and transform phlegm.

Her energy picked up on this formula, in particular

Chai hu 24	Huang qin 9	Gui zhi 9
Gan jiang 6	Gua lou shi 12	Zhe bei mu 12
Qing pi 6	Chen pi 6	Bai shao 15
Mu dan pi 9	Ze xie 9	Zhi gan cao 6

her mental energy, and her ear infection continued to get better, but she was still physically exhausted, and the constipation and cystitis were still present. The pulses had changed significantly. The right pulses were still fine, but the *cun* position was no longer deep but in the middle level. The left *guan* had completely changed, with no trace of the full wiry quality. Instead the guan and chi were fine and choppy and located in the deep level, and the *cun* was between the superficial and the middle depths and was soft and slightly floating.

Right hand	Cun	Guan	Chi
Suoerficial			
Middle			
Deep	1 2 2 2		

Fig 5a Pulse changes

Left hand	Cun	Guan	Chi
Superficial			
Middle			
Deep			

#### Fig 5b Pulse changes

It seemed that underlying blood and yang deficiency had come to the fore, and I prescribed a variation of dang gui huang qi jian zhong tang.

Dang gui 9	Huang qi 18	Bai shao 18
Gui zhi 9	Sheng jiang 9	Da zao 9
Zhi gan cao 6	Fu xiao mai 24	Fu ling 9
Mu dan pi 9	Ze xie 9	Zhi zi 6

#### **Dong pulses**

I believe I have not been alone in thinking that dong (spinning bean, stirred up) pulses are rare (Flaws 1995), and I had no experiential conception of a pulse without a head or tail. The definition of this pulse is rapid, forceful, slippery, short, and like a spinning bean. I was delighted to come across an interpretation of this pulse from Arnaud Versluys (2008) in which it is understood as a pulse that can be felt anywhere along the line of the artery both on the cun, quan and chi positions and also notably in between them, distal to the cun and proximal to the chi. It is a pulse that feels as if it is vibrating fast and jumping up towards the palpating finger, almost more superficial than the superficial layer. Dong pulses between the positions may be felt with the side of the finger when palpating the main position.

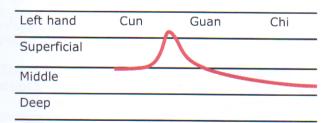


Fig 6 Dong pulse between cun and guan

Having been exposed to this idea of the *dong* pulse, I find that they are quite common in practice, and are a useful indication of accumulation or stagnation. The position of the *dong* pulse is an indication of the location of the accumulation. Although it may arise anywhere along the pulse, it quite commonly arises between the *cun* and *guan* pulses, indicating an accumulation at the location of

the diaphragm. Along with the relevant signs and symptoms, this can be an indication for formulas to harmonise spleen and stomach such as *ban xia xie xin tang* and its derivatives.

#### Conclusion

We can spend our whole lives improving our ability to take the pulse. It is possible to listen for the mitral heart valves (Hammer 2001) or to read the state of the *wei qi* (Yuen 2004) or the medical history of the patient on the pulse. As well as the three *jiaos*, the four levels and the six divisions, we can also read our own subjective pulses, and develop a direct sensitivity to the physical or emotional disharmony of our patients.

However, we need a solid foundation to help us to recognise and name the parameters of the pulse. The 3 Step System helps us to develop this solid starting point, and encourages us to work systematically with the pulse, giving us a common language that enables us to communicate with each other about the pulse in a way that can help us develop and grow our practice.

\*Chinese Pulse Images: The 3 Step System of Chinese Pulse Reading" by Frances Turner is available from Balance Healthcare at <a href="https://www.cambooks.com">www.cambooks.com</a> at £19.95. ISBN: 978-0-9559069-0-9

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