# PULSE DIAGNOSIS THE CUN POSITIONS AND THE LUNG

# by Peter Torssell

n my work with acupuncture and pulse diagnosis, I used to encounter a disharmony in the right cun-(distal) position without understanding why, since the patient did not have an apparent Lung problem. Through the years however, it has gradually become more comprehensible to me. Sometimes the disharmony of the right cun pulse has become normalised as the patient's problems have been helped. Since all the zangfu are in relationship to each other, how this happened may be explained logically. The Lung receives the essences from the Spleen. The Lung constantly co-operates with the Kidneys in the downbearing of qi and body fluids, and this connection enables us to breathe fully. Within the chest, the Lung and Heart cooperate in the expansion and regular circulation from the chest. Finally the Lung co-operates with the Liver in the regulation and spreading of qi, and through the qi mechanism (qi jie) they ensure to that not too much qi rises or sinks.

These relationships can explain how the Lung as "the minister ... [where] control and regulation is emitted" is affected by disharmony of any of the zang, and the degree to which the Lung is affected is reflected in the right cun position.

Before concluding one's pulse diagnosis, one should of course always feel and compare all six positions of the wrists to obtain a more thorough understanding of the actual pattern of disharmony. But in this article I limit the discussion to the Lung and the cun positions, especially the right cun. I would also like to point out that the disharmony felt in the right cun does not have to be one of the classical pulse qualities. Something very important to observe that reflects disharmony is abnormality in the arrival and departure of the pulse wave, which is quite a common clinical finding. Each pulse beat can be viewed as a wave with an arrival, a climax and a departure. The arrival phase is the growing or increasing of force, the departure is the decreasing or diminishing of force and the climax is the maximum force or top of the wave in between the arrival and departure phases. The arrival of the pulse wave corresponds to yang and the departure corresponds to yin and these two

phases should be equal, suggesting a dynamic balance of of yin and yang. In my experience it is common to find pulse qualities revealing pathology which do not fit into the classically described qualities. And I often find that the pathological quality is that the arrival and departure phases of the pulse are different, unequal or non-existent, which I often just write down on my case notes as "bad wave".

# The cun positions

My clinical procedure is to carefully palpate the pulse before acupuncture treatment and also during the treatment to be able to make adjustments or additions to the treatment. During the first years of clinical work, when noticing a disharmony at the right cun position, I asked about respiratory problems, cough, and pressure or other discomfort in the chest, but frequently the patient had none of these symptoms. Now, after careful observation of patients and the results of treatment, as well as a deeper understanding of TCM, I have realised that the right cun can often reflect problems of the Lung other than those that I originally asked about, as well as other problems of the upper jiao including the head, emotional problems or qi disturbances in general.

Before I elaborate more on this, we should remember that the Lung is thought of as the place where all qi is gathered in the early morning to be regulated before being spread out again. This is regarded as the explanation of why the radial pulse ( $qi\ kou$ ) is situated on the Lung channel and why this can reflect the condition of all the zangfu.

"The Lung receives the 100 mai in the morning audience" (*Suwen*, 21).

"Qi and tastes [wei] of the 5 zang and the 6 fu all come from the Stomach and their alterations appear at Qikou" (Suwen, 11)

The cun positions lie at Taiyuan LU-9 which is the hui-meeting point for the *mai* (vessels). The *mai* represent the circulation of qi and blood and their routes. This circulation is regulated by zong qi and reaches the whole body with the help of the Lung and the Heart, both reflected in the cun-positions.

In older more channel-oriented medical literature the left cun was said to reflect the Heart (deeper) and the Small Intestine (more superficial), and the right cun the Lung (deeper) and the Large Intestine (more superficial). This applies, for instance, to the *Nanjing* and the work of Huatuo. Later literature, especially that written by zang-fu-oriented herbal physicians such as Li Shizhen, said that the left cun reflects the Heart and the right cun the Lung. In the Yitong jinjing it is said that both the Heart and danzhong (chest centre) are reflected in the left cun and that both the Lung and the chest are reflected in the right cun. All these versions of what the cun reflect, agree that it is the upper part of the body, the yang regions. The channel-oriented approach, more intended for acupuncturists and tuina-physicians, derives from the fact that the channels of the Small and Large Intestines are situated on the arms and travel to the head, and that this therefore should be reflected in the cun. In the zangfu-orientated perspective of herbal medicine, the Heart and the Lung are the two zang in the upper jiao.

# Other Lung problems

If one notices a disharmony of the right cun and has already ruled out the possibility of infection such as influenza or the common cold, and respiratory problems such as wheezing, cough or pressure in the chest, one should not forget that the throat and the nose are principally ascribed to the Lung in TCM. There could for instance be a problem of the voice, or production of phlegm that has to be expectorated in the morning. Or there could be a chronically stuffed nose, in which case the right cun pulse could be slippery in the superficial part, or sometimes one can feel a branching off from the main pulse to an extremely floating thinner branch. Some patients who snore, especially those with apnoeas, also exhibit disharmony in the right cun pulse, which resolves when the problem is alleviated.

# Problems in the upper jiao

Problems with the muscles of the chest, such as aching from muscle training, tend to influence the right cun pulse. Problems in the chest area as a whole, for example deeper pain, tend to change both cun-positions. Accumulations and concretions such as tumours of the breast will also be reflected somewhere in the cun-positions.

If a disturbance is felt in both cun, one should not forget to check the neck. For instance in whiplash injury both cun pulses can have a flat quality (i.e. a bad wave).

The upper part of the back tends to be reflected in the right cun pulse. Tension and soreness in the area of the neck, shoulders and upper back is maybe the most common problem among adult Swedes and this tends to be reflected in the right cun pulse. I regard this problem as a constriction of the normal movements of the Lung qi, even if it is often based on uprising of Liver yang. When Liver qi stagnates and rises it may disturb not only the Stomach, but also the Lung. This is something I see on a daily basis in my practice. Both the Stomach and the Lung have a natural descending

direction, but the Lung is placed at the top over all the zangfu and presides over their qi movements. In the *Xue zhenglun* it is said that the Lung has the action of preventing qi from rising excessively<sup>1</sup>. This implies that mental stress, which makes the qi rise, will negatively affect the Lung's function of downbearing qi and fluids. This Lung function is classically called *qing su* or in the more modern expression *su jiang* in chinese, which may be translated into "depuration and downbearing"<sup>2,3</sup>. If this downbearing function of the Lung is disturbed, the right cun pulse might typically be without root.

"If the shoulders are in a good condition and the back well developed, then the Lung is stable and solid." (*Suwen*, 47<sup>3</sup>)

"If the Lung is stable and strong, there are no diseases like coughing or qi that rises too much" (*Suwen*, 47<sup>3</sup>)

"The qi of the Stomach rises and flows out to the Lung and then afterwards to the openings of the head and the face and brain" (*Lingshu*<sup>3</sup>)

The function of the Lung in governing qi, especially in the upper jiao, can offer a general explanation as to why many problems of the head are reflected in one of the cun pulses. Sometimes however, such problems seem more related to the yang channels that travel to the head. Yangming channel contains as much qi as the channels rich in qi, and as much blood as the channels rich in blood<sup>3</sup>. The pathway of the Large Intestine channel of hand yangming often explains why headaches and toothaches may be reflected in the right cun pulse. The Stomach channel of foot yangming, has a very close relationship to both the Large Intestine channel and the Lung. When Stomach qi rises with force such as in vomiting it is often not only felt in the right guan position, but also in the right cun, commonly with a superficial and slippery quality.

The arms are part of the upper jiao and closely relate to yangming channel, which according to the classics is an important channel for the distribution of nourishment to the extremities. Accordingly I find it logical that the right cun pulse can exhibit disharmony when there are problems of the arms such as bi-syndrome.

### Emotional problems

Sometimes when I have encountered a "bad wave", that is less than optimal arrival and departure of the pulse wave, in the right cun pulse, it has correlated with feelings of melancholia, lack of joy, depression, unhappiness, hopelessness, sadness and sorrow. In chronic states this may coincide with some tongue findings, for example in the Lung area of the tongue the centre crack might be deepened or tortuous, or the centre crack might be split into many small cracks wriggling forward, more or less parallel to each other. With these signs it is also common to find problems of the upper thoracic or lower cervical spine.

The Lung is "the master of qi" and "the minister" in close alliance with the emperor (Heart) who aspires to express the joy of life (le). The feelings that according to TCM are

most closely associated with the Lung are sorrow, sadness and a burdened down, oppressed feeling. They result in or correspond to qi being either decreased or stagnant. These feelings which can be regarded as opposites to joy, affect the spreading and downbearing movements of the Lung.

According to the Indian tradition one can know if a person is happy or not by feeling the radial pulse. Personally I believe that the wave of the pulse is one of the more important indicators of this. One of Dr. John F. Shen's ways of explaining a "sad pulse" is that the wave of the pulse is bad, expressed in flatness<sup>4</sup>. It affects the cun positions when there are feelings of sadness or sorrow. He has also said that when the wave feels oppressed in the right cun it is due to worry hitting against the Lung<sup>4</sup>. Elisabeth Rochat explains that the emotion *you* is unhappiness, a feeling of being burdened down by worries, dark thoughts and oppression. *You* is often associated with the Lung.

A common experience of mine is treating someone with tension in the neck, upper back and shoulders, where I for instance needle Lieque LU-7, Sanjian L.I.-3 and Neiguan P-6 with Taichong LIV-3 and Xuanzhong GB-39. While the patient is lying with the needles in, I might treat locally by doing acupressure on Jianjing GB-21 and Yunmen LU-2. If the cun positions subsequently assume a good wave, this will almost certainly coincide with the patient breathing fully and describing himself as in a state of very relaxed ease.

"When the Lung is in a good condition, then there is harmony and ease ... " (Lingshu,  $47^3$ )

Elisabeth Rochat<sup>3</sup> has explained that pathology in older texts more often than in the modern ones emphasised the connection between the Lung and the Heart. The Lung cooperates closely with both the Heart and the Liver. The Heart and the Liver are the two zang that are most closely associated with the emotional sphere. These two are also the most important zang for the regulation of blood.

# Qi-disturbances in general

"All qi belong to the Lung" (Suwen, 10<sup>3</sup>).

That qi deficiency affects the Lung is well known, but there are other qi problems that affect or relate to the Lung. All qi is gathered in the Lung before being diffused. Because of this the Lung is easily disturbed by stagnation of qi and the Lung's function of diffusing and controlling qi can be used in the treatment of general qi stagnation. Examples of this are the satisfying effects of the famous combination Hegu L.I.-4 and Lieque LU-7, the Lung-area in ear-acupuncture and the acrid taste (which has the same qi spreading movement as the Lung) on people with qi stagnation in general.

That qi stagnation affects and disturbs the Lung is something that I have noticed clinically for a long time, but I interpreted this as a stagnation of the Liver affecting the Lung. Volker Scheid¹ asserts that early in the medical literary tradition, stagnation of qi was more related to the Lung than to the Liver. In the *Suwen* it says:

"All qi stagnation belong to the Lung" (*Suwen*, 74<sup>1,3</sup>). Scheid explains that the Lung has been called "the upper general",

while the Liver, nowadays commonly referred to as "the general", in this context is regarded as "the lower general". Both of these zang regulate qi; the Lung from above and the Liver from beneath with the help of mingmen. A known point-combination that according to my opinion accomplishes this regulation from both above and below is "the four gates" i.e. Hegu L.I.-4 and Taichong LIV-3.

Other examples of harmonious combinations for the Lung and Liver are Chize LU-5 with Ququan LIV-8 for allergies, Taichong LIV-3 with Feishu BL-13 and Dazhu BL-11 for problems of the upper back and neck, and Qimen LIV-14 with Zhongfu LU-1 to open the chest and regulate qi in general.

# Allergies

Behind intolerances and allergies there is often a scenario of multiple zangfu disharmony affecting the Lung. Rather common is fullness of the Liver and/or deficiency of the Kidneys, but I would like to especially emphasise the role of the middle jiao. Imbalances of the Spleen and Stomach will give rise to such unclear products as damp, phlegm and heat that will disrupt the qi and yin of the Lung. I believe that the significant increase of allergies in the west or where the western way of living predominates, to a large extent is due to changing eating habits such as overeating and unbalanced eating. In Sweden, which is one of the world's most allergy-affected countries, this unbalanced eating consists mainly of copious sugar, milk and wheat products. Allergic rhinitis, asthma and eczema have increased dramatically in recent years in Sweden, and according to the Swedish Allergy Conference 2001, almost half of Swedish schoolchildren have some kind of allergy or hypersensitivity.

Through the years I have treated many allergic patients, and I have observed one characteristic of the pulse that they all have in common. When I let the finger rest at the superficial level at one or both cun positions, and (usually) roll the finger laterally, somewhere in this region I feel a "scraping", "buzzing" or something like an electrical sensation under the finger. It might be felt laterally outside the wall of the radial vessel, or perhaps it is that the wall gives the impression of being diffuse, unclear, undefined and instead gives the impression of an arrythmic/irregular electrical sensation. If it is found laterally it may be both superficial and deep. In my patient papers I have more and more come to call this quality "lateral electricity".

This "lateral electricity" I have palpated more or less in all allergic patients with typical signs of wind, such as rapid onset of urticaria, or itchiness of the nose, eyes, ears, gums, throat and skin. When I have found allergic patients presenting without this quality, it has been due to their using anti-allergenic medicines that effectively relieve the symtoms. When they don't use the medicine, the "lateral electricity" returns as long as the allergy is still there. It is manifested in both the acute and non-acute phases, but it has a tendency to be stronger or more distinct during the acute phase. This "lateral electricity" might also be found in cases of other forms of itching anywhere on the surface of

the body or when there are blisters of the mouth like aphthae.

Sometimes I find this quality in patients that do not have any itching, aphthae or obvious allergy, and I nowadays interpret this as "externally moving wind" with a suspicion of oversensitivity towards something they are eating.

I have not found this quality in patients where wind has penetrated and obstructed the circulation as in sudden peripheral facial paralysis. The "lateral electricity" seems related to wind ready to flare up and move around.

What I have found in the literature that most closely resembles "the lateral electricity" is in the *Maijing* (Pulse Classic)<sup>5</sup>. In the chapter on "Bian Que's method of the yin and yang" it says about the cun-positions:

"A pulse that suddenly becomes thunderous and replete at the sides suggests piao feng".

The translators' comment is that this is interpreted as a rash due to wind settling in the exterior. "Piao feng" can be translated as "floating" or "fluttering" wind, which would be very close to the actual syndrome according to my experience. The quality being found laterally and explained as "thunderlike" resonates very well with my experience of "lateral electricity". As I have already explained it does not have to be replete, depending on the phase of the problem.

As with most conditions, the palpation of the pulse during treatment most often reveals the outcome of the treatment. If I feel this "lateral electricity" before inserting the needles, and after ten minutes palpate again and find it absent, the treatment will have good results. I find pulse diagnosis an immediate and invaluable method of evaluating the treatment effect.

In TCM, the Lung is regarded as the topmost zang. Just below the Lung, there is the Heart. In the middle there is the Spleen, then the Liver and at the lowest level the Kidneys. This corresponds with the depth which each organ nourishes and vitalises. The *Maijing*, dicussing the pressure and depth of pulse palpation, says:

"... the weight of 3 soybeans. This pressure penetrates the skin and hair and [reflects] the Lung. A pressure amounting to the weight of 6 soybeans reaches the blood vessels and [reflects] the Heart. A pressure amounting to the weight of 9 soybeans reaches the muscles and the flesh and [reflects] the Spleen. A pressure amounting to the weight of 12 soybeans reaches the level of the sinews and [reflects] the Liver. [Finally] press to the bone and then release the pressure. If then the pulse comes impetuously, this indicates the Kidneys."

Superficial is yang when compared to deep and the cunpositions are yang (corresponding to the upper part) when compared to the chi-positions (proximal positions). Both superficial (external) and cun are yang and can therefore reflect yang-phenomena. When wind attacks the surface, from a TCM-perspective it can be viewed as an attack on the Lung; however yang phenomena on the surface may also reflect a disturbance of the organ just below the uppermost one: the Heart. In *Suwen*, 52 it says that "The Heart masters

the biao"(the upper and exterior portions) to describe its yang-movement. An exaggeration of this yang-movement could lead to sores in the mouth for instance, which I have described as manifesting in "lateral electricity".

# The diaphragm

The diaphragm, situated below the Heart and Lung and above the middle jiao, can be seen as a filter, preventing the turbid from rising up to the upper jiao³. Dr. John F. Shen⁴ has taught that when the fingers are rolled proximally at the cun-positions, a sensation of fullness indicates pathological involvement of the diaphragm. I have found this useful, and I have from this finding chosen points such as Neiguan P-6, Rugen ST-18, Qimen LIV-14, Gaohuangshu BL-43 and Geshu BL-17 to harmonize this pulse-characteristic which consequently leads to improvement of the patients′ symtoms.

This fullness may be felt proximally at both cun-positions and can indicate diaphragm qi ( $ge \, qi$ ), which is often due to stagnation of Liver qi<sup>3</sup>. This obstructs the passage of qi through the diaphragm with symptoms such as a blocked feeling in the epigastrium/hypochondrium, shallow breathing, difficulty in swallowing and regurgitation.

If this proximal fullness is only felt at the right cun, my experience is that it indicates a disturbance of the relationship between the Lung and the Spleen/Stomach, which leads to an accumulation in the diaphragm of for instance phlegm and thin mucus (*tan yin*).

If it is only felt at the left cun, it can indicate that the Heart has been shocked or has developed fire due to intense emotions. For instance one patient had this pulse a couple of hours after being close to a car accident. In another person I found this pulse when he for some time had been very worried because of pressure put on him by a couple of people linked to criminal activities. This would have been called "fearing arrest" in some classical books. This pulse-characteristic disappeared after a successful acupuncture-treatment which cured this feeling of inner agitation.

### References:

- Volker Scheid's seminar on the Lung at the Anglo-Dutch Institute of Oriental Medicine, Amsterdam, 1999.
- 2 Charles Chace. Seminar on the Lung, Rothenburg Conference, 2000.
- 3 Elisabeth Rochat de la Vallée. Information from her books or mainly from a series of lectures in Sweden during the period 1995 -2000.
- 4 Dr. John F. Shen. Information mainly from his seminar in York 1995, Dublin 1996 and personal communication with Alan Papier who has worked with Dr. Shen.
- 5 The Pulse Classic. A translation of the Mai Jing by Wang Shuhe, Blue poppy press

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