

FIVE DRAGONS
ACUPUNCTURE COLLEGE
CORRESPONDENCE COURSE



LESSON 7
OF
31 LESSONS

The Five Dragons Acupuncture College
accepts the Fair Use Doctrine of the Copyright Laws
and here-by grants permission to make one copy of this
Acupuncture Correspondence Course in 31 Lessons
For Educational and Teaching Purposes.

Recommended books to simplify your research are as follows

Essentials of Chinese Acupuncture
Gray's Anatomy
The Merck Manual
Taber's Cyclopedic Medical Dictionary

The people of the entire English-speaking world owe a debt of gratitude
to the acupuncturists and medical researchers
who have made possible this correspondence course. Thanks go to:

Dr. Nguyen Van Nghi,
Charles H. McWilliams,
Dale E. Brown,
Gregory Delaney

Full acknowledgements are found in Lesson 31

Distributed as shareware by
Bamboo Delight Company
P.O. Box 2792,
Saratoga, CA 95070

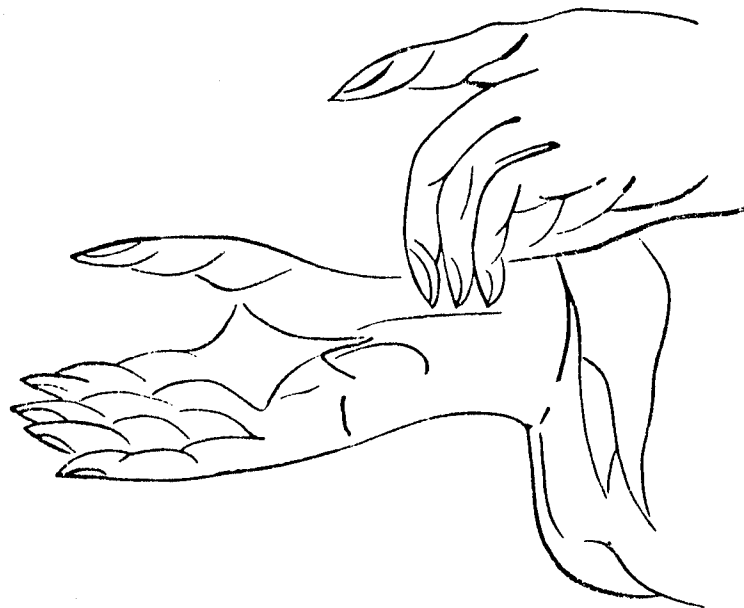
<http://www.bamboo-delight.com>



MODERN & TRADITIONAL ACUPUNCTURE

LESSON 7

ORIENTAL DIAGNOSIS I - THE TWELVE RADIAL PULSES



When one speaks of "diagnosis" in relation to the medicine of the Far East, most informed Westerners immediately think of their intricate methods of palpation of the radial pulse. A misconception still persists that the physical diagnosis of ancient Chinese medicine was confined solely to palpation of the pulse. Certainly the study of the pulse may well be the most important diagnostic procedure, since vast amounts of literature have been written on this subject, but actually it is not the only method.

The medicine of the Far East uses four main methods of diagnosis. These four methods are: (1) Observation of the patient (including sound of the voice, color, etc.); (2) Interrogation of the patient (history, background, symptoms, eating habits, even interviewing of the patient's relatives, etc.); (3) Clinical examination of the patient (checking for weak and painful acupuncture points on the body, particularly the abdomen, thorax and along meridians); and (4) Pulse diagnosis. Only the latter is introduced in this lesson, however, the other three methods are important in confirming a total traditional diagnosis, and all are covered in this course.

First of all, it must be mentioned that as far as acupuncture (including moxibustion, acu-pressure, etc.) diagnosis does not mean you must necessarily name the specific illness or disease as in Western medicine. The main concern is to identify and locate imbalances of energy (ch'i) either between or within meridians, which leads to determination of the manner of treatment to be applied. Most classical Chinese literature in fact goes into great detail on diagnostic methods, and gives very little information on actual treatment. The important factor then is the proper diagnosis, the application of treatment is relatively easy once proper diagnosis has been established.

Many patients will come to you knowing exactly what their problems are, as previously established by our Western clinical and laboratory diagnostic methods. With others the symptoms may be so clearly defined as to offer no doubt as to the course of treatment required. Based on thousands of years of clinical experience specific acupuncture treatment formulas have been developed for treatment of specified symptoms and diseases which have been determined or diagnosed by the methods you are accustomed to already. This would be a strictly modern symptomatic approach to acupuncture, generally quite effective.

Certainly, those of you taking this course who have access to the full range of Western diagnostic methods (anesthesiologists, physicians, chiropractors, and so on) should make use of them when considering acupuncture treatment. However, it is still important, if not essential, to have a working knowledge of Oriental diagnosis for the most effective practice of acupuncture. It is well known that many symptoms and diseases may have quite different causes, or indicate problems in more than just one organ, and even the most thorough diagnostic check-up sometimes fails to reveal the cause and name the illness.

Even if Western diagnosis seems conclusive and you choose to give acupuncture treatment symptomatically, using the well tried formulas, at least compare it with the diagnosis indicated by the 'pulses' (note the plural). In spite of the fact that you are not acting on the pulse diagnosis readings in this treatment method, it is important that verification be made by the traditional acupuncture methods, especially that of the pulses. Do this not only before proceeding with acupuncture treatment, but also during and after each treatment. By doing this, you will be constantly improving your ability to diagnose, and you will learn how the pulses alter in response to what you do in treatment.

These methods of physical diagnosis are based entirely on experience, which has accumulated throughout the ages by observations of the obvious external symptoms and complaints of patients. In turn these were recorded and made to harmonize with the infallible theories of the cosmos to create a workable system of overall diagnosis. Although most of these observations are not substantiated by modern medical diagnostic theories, as the recorded experience and thought of three thousand or more years of practice, these observations certainly are of merit for further investigation. These methods have been used on millions of individuals with some apparent success, and they are still being applied throughout the Orient, independent of, or in conjunction with, Western medicine.

A thousand years before Christ, the Chinese saw that there was a definite relationship between the heart beat, respiration rate and activity, blood flow, etc. They felt this relationship reflected the state of health of the body as a whole. Western medicine acknowledges this, and today these are essential elements of clinical examination.

In order to determine the state of the blood circulation, the Chinese at that time distinguished a number of places (other than the wrist) where it was possible to take the 'pulse' and logically draw conclusions from them concerning the functioning of internal organs. These were called the 'peripheral pulses' and arterial examples are: the carotid, temporal, femoral and dorsal arteries of the feet. There are of course many other places, in fact wherever an artery runs close to a bone and to the surface. It is obvious that these blood vessels have a definite anatomical and positive connection with the internal organs.

Perhaps the greatest discovery made by the Chinese was that through the pulses it is possible to determine not just the health of the body as a whole, but also that of each inner

organ separately. [Modern medicine has proven that each disease of an organ alters the pulse beat in a specific way, and that variations in the pulse beat can indicate irregularities in the functioning of various organs.] From the pulse beat they could 'read' whether the organ had too much or too little 'energy', or if it was 'full' or 'empty', underactive or overactive, and whether its Yin or Yang predominance or changes were what they were supposed to be.

For centuries Oriental 'doctors' have known that the palpation (examination by sense of touch) of the pulses at the wrists could give a precise indication of the true state (especially weaknesses) of the internal organs and parts of the body (including psychological states). [This concept has an extensive geographical compass, ie. the medicine of India and Arabia, and was not just limited to the Chinese.] This of course was a more recent and further development of the taking of the peripheral pulses at other parts of the body. Orientals believe that any disease, whether physical or mental, that produces a physiological effect will reveal itself in the pulses ---OFTEN BEFORE ANY ACTUAL SYMPTOMS APPEAR.

It is interesting to note from the seminars, that the 'pulse diagnosis' is the one aspect of Chinese medicine Western physicians (with enough foresight to get past the 'hog-wash, impossible' stage) are clamoring to learn. There is no doubt whatsoever that there is great merit to it, and beyond the concept of body energetics, it is one of the most exciting possibilities Chinese medicine presents to the rest of the world. To those who have the foresight to learn and apply it, pulse diagnosis holds the key to the fulfillment of the wishes and hopes of every physician, no matter what style of medicine practiced. If illness or future illness can be detected right in the doctor's office (without complicated laboratory tests) by nothing more than a study of the patient's pulses, and treated (with acupuncture or any other treatment) or stopped in its initial stages . . .

It has been verified by the Japanese that the various segments of the radial (thumb side) artery as utilized in Chinese pulse diagnosis, do indeed present considerable differences in their pressure curves, and are not just an unfounded invention. The Japanese are currently working on an electronic instrument to evaluate and analyze the radial pulses leading to instrumental diagnosis. One must of course wonder if machines could ever be sensitive enough to feel such subtle differences as can be distinguished by finger touch.

Also, investigations carried out by the French, jointly with their traditional Chinese colleagues, have provided more proof of the efficiency of pulse diagnosis. The French doctors used every diagnostic procedure available to modern medical science, and eliminated any inconclusive individuals among those tested. In almost eighty percent of the test cases the diagnoses coincided, although the Chinese 'doctors' made theirs strictly by feeling the pulses. Several similar investigations have been carried out by the Germans, Japanese and Russians, with an even higher correlation percentage, despite the highly 'subjective' nature of pulse diagnosis. Now in Europe and the Soviet Union as well, acupuncturists use pulse diagnosis to determine diseases Western medicine is unable to diagnose, and therefore unable to cure.

Physicians will appreciate the fact that a heart specialist is able to 'read' many more factors from the single radial artery pulse, than an ordinary general practitioner, because of additional grounding in pulse diagnosis. From the tension, rate and force of a pulse a heart specialist can determine specific heart problems as well as check for deterioration in arterial walls. Interestingly enough, the heart specialist divides the pulse into different parts as does the acupuncturist. However, even the best heart specialist detects less from the pulse than the average traditionally orientated acupuncturist.

As far as the locations or the levels of each organ's pulse on the wrist are concerned, these are not just arbitrary or based solely on experience. They have been established by a very strict law, perhaps the most important law or rule of Chinese medicine itself. The pulses show a perfect correspondence to the Law of the Five Elements which we will cover in a later lesson, as well as how to apply it to diagnosis and treatment. Interestingly enough, this same law is now being used in pharmacological research in occidental countries to develop new and "improved" drugs.

For the Orientals, pulse diagnosis is the characteristic method of treatment determination in acupuncture, acu-pressure and herbal medicine, and has been developed and improved over many centuries. Even today, this idea of the multiple pulses, is still being used by all traditional acupuncturists and is inseparable from their methods of treatment. Expert evaluation of the pulses reveals not only if the energy (ch'i) within the meridians is in excess or deficient, but many other factors such as location, severity, the cause of the disease, and a definite plan of action for treatment.

Through evaluation of the different pulses, it is possible to know whether an organ's function is disturbed by either an excess of Yin or a deficiency of Yang, in which case the patient has a Yin illness. Or, whether it is disturbed by either an excess of Yang or a deficiency of Yin in which case he or she has a Yang illness. To restore balance, the acupuncturist must either sedate (dissipate) the excessive factor, or tonify (stimulate) the deficient factor in the Yin/Yang imbalance. By taking the pulses, the acupuncturist knows whether he must tonify or sedate. Once the harmonious interplay of these forces has been restored, the patient's body is able to overcome the problem by itself.

It must however be pointed out that examination of the pulses is not in itself sufficient to form a diagnosis, at least not for the beginning acupuncturist. Sometimes, for example, the pulses do not even correspond to the patient's actual symptoms, or vice versa. One or more of interrogation, observation and clinical examination of the patient is indispensable in forming the total, over-all diagnosis, especially in the light of differing symptoms.

Examination of the pulse has probably always been part of Western medical diagnosis throughout history, right back to Hippocrates and further. Western trained doctors routinely check the pulse on the wrist (usually the right wrist although they would be much better off using the left wrist as we shall see further on) at one position, without particular concern as to the exact placement along the radial artery. One position is as good as another just as long as the "throbbing" can be clearly felt.

The Westerner uses the pulse as a minor diagnostic aid for the heart and the circulation. However, in Chinese medicine, where pulse diagnosis has been developed into an art and a science, a distinction is made between 'the pulse' and 'the pulses'. The acupuncturist doesn't just hold your wrist counting the beats he feels against a watch, entering the result on your medical record. Instead he makes a thorough 'study' of the pulses at both wrists. To them, the pulse is used as a very significant and direct diagnostic tool for the whole person---physical, emotional and spiritual. Every other diagnostic procedure is auxiliary to it.

THE CHINESE METHOD OF PULSE DIAGNOSIS

Chinese medicine works with three actual pulse positions along the radial artery in the radial groove, of both the right and the left wrist. They divide the radial artery into three definite sections on each wrist, and use a different finger to feel each of the three sections or positions. The pulses are taken using the index, middle (counting the thumb as a finger) and ring fingers placed side by side, exerting varying degrees of pressure on the radial artery. The little finger and the thumb are not used.

The pulses are evaluated with the extreme fleshy tips (or pads) of the three fingers, which is the most sensitive part. The last phalanges (joints) of these fingers should be held almost perpendicular to the plane of the wrist. The finger-nails must be cut very short and kept well trimmed, or they will interfere with sensitivity of feel. [One wonders how the Chinese were able to perform pulse diagnosis with the extremely long fingernails as illustrated on the cover of this lesson---but then again, it is only an elaborate classical text illustration.]

On each wrist there are three pulses, and hence three finger placement positions---a distal pulse position (closest to fingers), a middle pulse position, and a proximal pulse position (furthest from fingers). The very tip of the middle finger which corresponds to the middle or central pulse position is placed on the radial artery, at the level of the radial styloid process (knob of bone at the wrist) which corresponds to the eighth point on the Lung meridian. The index finger is used for the distal pulse position, between the wrist crease and the styloid process, which corresponds approximately to the ninth acupuncture point of the Lung meridian. The ring finger is used for the proximal pulse position which is a point on the radial artery just medial (palm up) to the seventh point of the Lung meridian.

Moreover, each of these three pulse positions on both the right and left wrist, consist of two 'depths of feel' at each position---a superficial or surface pulse, and a deep pulse. Hence, we have six actual, different pulses on each wrist for a total of TWELVE PULSES ALTOGETHER. Although the positions are the same on each wrist, each pulse position and 'depth of feel' thereof, represents a specific organ or function (meridian). No two of the twelve different pulses in total represents the same organ, function or meridian.

Classically, there are 14 to 18 pulses, in that some of the pulses have an intermediate 'depth of feel' between the superficial and the deep pulse. However, only the twelve main pulses are covered in this lesson in order to avoid confusion initially. In practice the intermediate pulse is not used---its value lies in determining the final balance of the pulses in the more difficult pulse diagnosis situations.

So far then, we have a total of twelve different pulses in six locations (positions) along the radial artery of both wrists. Speaking only as far as 'depth of feel' is concerned, six of these twelve are the superficial or surface pulses, and six of them are the deep pulses.

BEFORE YOU PROCEED ANY FURTHER IN THIS LESSON, try the following experiment. Very lightly press the tip of your index finger (forefinger) on the radial artery of the opposite wrist. For thirty seconds or so, feel the beat (throbbing) of the pulse somewhere near the Lu-8 acupuncture point location. Mentally note the sensation you are feeling.

Rapidly now, without lifting the finger or changing its position in any other way, considerably increase the pressure of the finger tip, and then ease-off on the pressure just a slight bit. Hold this deeper position for a few seconds---the sensation of the pulse almost seems to disappear and then reappear---with an entirely different sensation than when you pressed that spot lightly. Try this a few times at slightly different locations and you will agree that it almost seems as if you are feeling the pulses of entirely different people.

Let us have another look at what we have said so far! Suppose we had water or any fluid flowing through a resilient, thin-walled, rubber or plastic hose, and very lightly touched the hose with a finger tip. Could we not 'feel' the sensation of the fluid flowing within the hose? Certainly! We don't have to compress the hose very much in order to get the sensation of this flow quite distinctly. (If you can find such a hose with a proper connection to a water tap you can try this experiment for yourself. Some hand-held 'telephone style' add on showers which connect to the bathtub faucet have plastic tubing, and also some feminine hygiene supplies are available with either tap or water bottle connectors).

Imagine now, steadily compressing this hose or tube by increasing the pressure of the finger until the flow has been stopped. Then, very slightly release the pressure to allow only a small amount of fluid to flow through it. Maintain this 'deep' pressure, and you can now note an altogether different sensation of flow from that of the first or superficial touch. At this greatly compressed deep position you may be more aware of the actual resilience of the hose itself, or of increased water pressure, volume or speed of flow, etc.

Continue this experiment, or try to imagine the effect which varying the surface upon which the hose rests would have to the sensations at both levels. Resting on a hard surface should give a different feel than the hose resting on a soft surface. Also, one could try different layers of materials between your finger tip and the hose itself, to simulate the layers of skin above the radial artery. All this would again provide different sensations to the touch.

If someone else in the house turns on another faucet, might there not be a momentary hesitancy in the flow---a drop in pressure, that could be felt with your finger on the hose?

Whether or not you actually do this experiment, you will have to agree that it is not 'silly' to suggest that a pulse felt superficially and deeply in the same place, or in different places along the same artery (over different surfaces and outer layers) can give noticeably different 'readings'. Can you now see the possibilities of differences in sensations of applied pressures at the same pulse position?

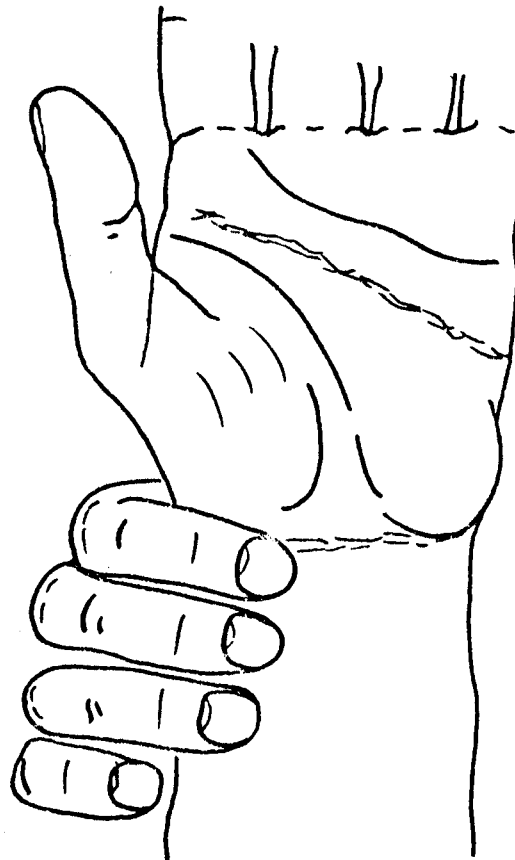
In Chinese pulse diagnosis the practitioner uses his own pulses as one of the standards by which to assess those of his patients. Before he diagnoses those of a patient (and sometimes afterwards), he will 'read' his own pulses. The sensations he feels in a patient's pulses are always relative to his own. Quite naturally, his own pulses will be expressing themselves very subtly in his fingertips and therefore any abnormality in his own pulses might otherwise be discerned as an abnormality of his patient's pulses.

As well, by taking his own pulses he has a comparison to how a normal, healthy person's pulses should be at that particular time of day, season of the year, etc. It is naturally assumed that the practitioner is in good health in order to set the 'standard' for the pulses, or at least takes into consideration any minor variations he has from 'perfect' health. There should certainly be no reason for the practitioner not to be such a model of good health, through simply applying to himself what is being taught in this course first.

Does the whole 'pulses' thing start to make a little bit of sense to you now? Remember this---the acupuncturist compares the patient's pulses to those of healthy individuals using his own as a judgement 'standard'.

Let's learn now how to 'read' your own pulses, since you will have to do this so many times in the course of your acupuncture treatments. Then, we will go on to how to do those of your patients. Find a quiet place to sit comfortably and relaxed so you can concentrate on the following.

To feel the pulses of your left wrist, rest the back of your right hand on a desk or table. Then place the back of the left wrist on the palm of the right hand, and curl the fingers of the right hand over so as to touch upon the left hand's radial artery. Place the middle finger at the level of the bony prominence above the wrist fold (styloid process) to touch the artery at Lu-8. The index or forefinger will then rest almost naturally in the space between the wrist fold and your middle finger's position. Part of the index finger may even be on top of Lu-9 at the wrist fold depending on the size of your wrist. The ring finger will fall almost naturally into the correct third (most proximal, medial to Lu-7) position. Similarly, rest the back of the right wrist on the palm of the left hand to feel the pulses of the right hand.



FEELING YOUR OWN PULSES

In actual practice the pulses are felt opposite to the way you did on Page 10. In otherwords, the deep pulses are felt first, and then pressure is 'eased-off' to feel the superficial pulses at that same position. It must be mentioned that some authors advise taking the superficial pulses first, and others say it does not matter which is first. True traditional methods insist that the deep ones be 'read' first. It has been our experience, that if this is done, it is much easier for a beginner to learn and make a good differential evaluation of the pulses.

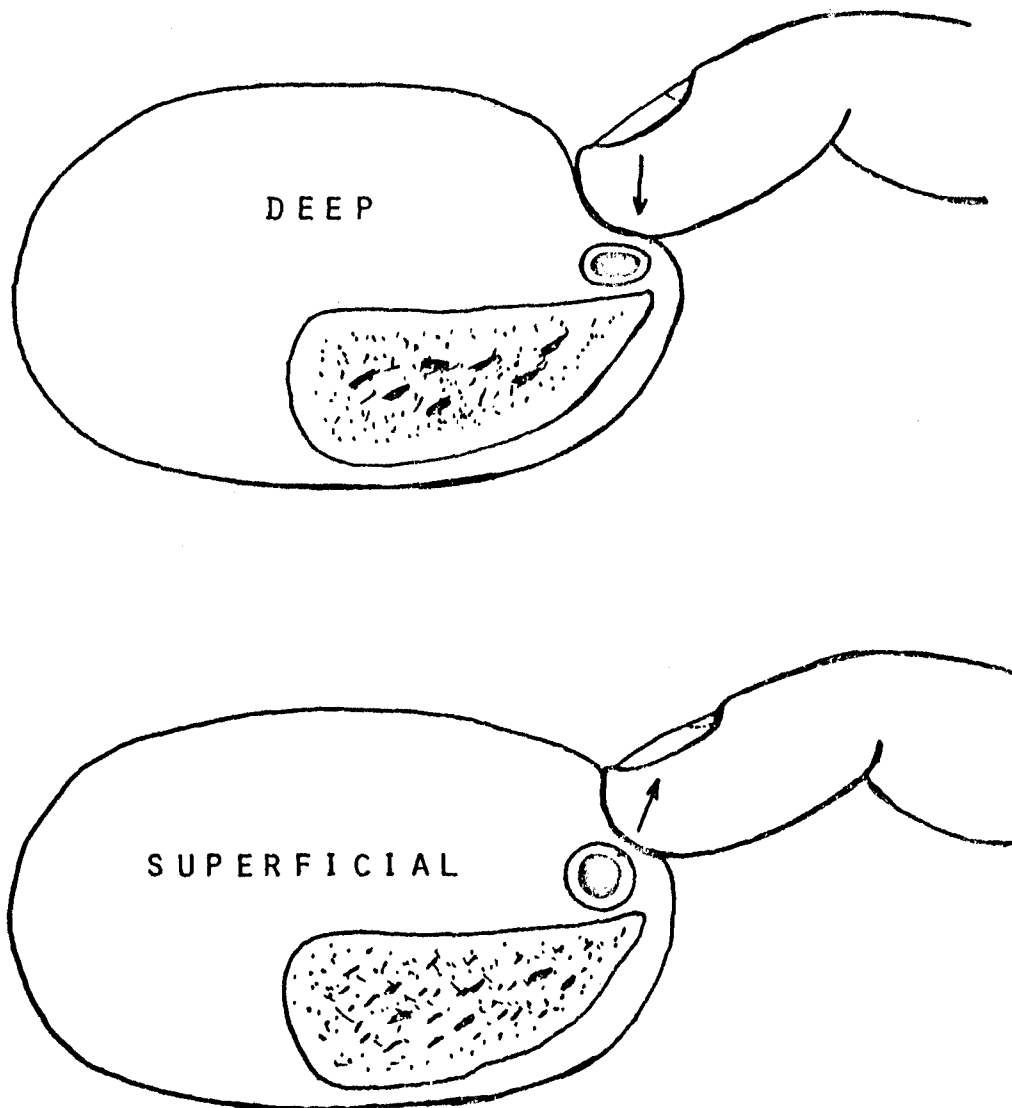
First, place all three fingers, side by side, in proper position along the artery on the wrists to be tested, as previously described. To judge the DEEP PULSES one applies heavy pressure with the finger-tips at all positions at the same time, sufficient to completely compress the artery against underlying bone structure right from the very start. Then, the pressure of all finger-tips together is quickly released, gradually and evenly, little by little, releasing only enough pressure until the 'pulsing' of it is felt in all the finger-tips. This same pressure is then held and constantly applied.

The deep pulse is often compared to the average blood pressure---the systolic pressure if you will. More than this though, in Chinese thinking it reflects the sensation of the flow of blood and in the long run to the fundamental composition of the blood.

To determine the SUPERFICIAL PULSES the heavy pressure of all the finger-tips together, is gradually released until the 'pulsing' of the artery can no longer be felt at any of the positions (all of the fingers). HOWEVER, DO NOT LET ANY OF THE FINGER-TIPS BREAK THEIR CONTACT WITH THE ARTERY ITSELF. Do not remove or lift any of the fingers so much that they are no longer resting directly on the skin. Now the pressure of all finger-tips together is gradually and evenly increased very lightly, sufficient only to actually feel the 'pulsing' of the artery again IN ALL OF THE FINGERS at all of the positions. This very light pressure is then held and constantly applied.

This superficial pulse is often compared to the variable blood pressure---the diastolic pressure and the beating in rhythm with the diastole phase of the heart's cycle. But more than that, in Chinese thinking, it reflects the elasticity of the arterial walls, and in the long run the cellular exchanges of the body.

The diagrams below (cross-section of right wrist) may give you a better idea of what it is you are doing in regard to the two 'depths of feel'.



So far, we've got your fingers in the proper positions and we've explained about the two 'depths of feel' at each position. Now, you have got to try to concentrate on what each finger is feeling, individually---without lifting any fingers, loosening the pressure, or getting any of the other two fingers 'out of the way' in order to concentrate better on what any one finger is feeling. Tricky, eh?

A few things to remember! It is most important that you use the proper finger for each of the three positions. You must also try to eliminate in your mind what the other two fingers of the same hand (or when doing diagnosis on a patient, what all the other five fingers) are feeling. Concentrate only on one finger's sensations, and then in turn the next finger, then the next, and so on.

IT IS OF PRIME IMPORTANCE that you try to maintain the finger pressure of all three fingers of one hand together, as a whole---as a unit---once you have established the proper deep and superficial positions. Once this has been done, hold the fingers as a unit, as steadily as possible, neither decreasing nor increasing the pressure during the entire time you are studying those particular pulses.

Start by concentrating on what the finger nearest the wrist fold is feeling. Next, concentrate on what the middle finger is feeling. Then, on what the finger furthest away from the wrist crease is feeling---this better be your ring finger, or you are doing something wrong. For practice, first feel the deep pulses, and then the superficial pulses of the same hand. Then do the same for your other hand.

Do this a half dozen times, on each of your wrists, before going on to the next page of this lesson.

It won't take you too many times at feeling your 'own' pulses to discover that the beat of the pulse on the middle finger is stronger than on the other two fingers of the same hand. This is not an abnormality, but rather physiologically explainable, in that under the middle finger the radial artery is closer to the underlying structure of the radial styloid itself, and hence because of a firmer background the pulse will be easier to feel. [Remember, how the surface that the tube rested on, in our 'imaginary' experiment with the tubing, could conceivably affect the sensations of feel it might have.] Naturally if unrecognized, this could radically affect our diagnosis as we shall see later on.

What are we going to do about this? Simple---we must learn to eliminate this always present difference, by compensating in finger pressure at the middle positions at all times, not only in taking our own pulses, but also when diagnosing patients. The pressure on all three fingers, at both depths, cannot be exactly the same, in that we must learn to use less pressure with our middle fingers, than with the other two of each hand. Please note we are not attempting to equalize pressure in all three fingers.

How do we do this consistently and effectively? The best method of doing this lies within the manner of determining the actual deep and the superficial pulse pressures themselves. To determine the deep pulses we put sufficient pressure on the artery to completely compress it and then relinquish pressure until the beat of the pulse reoccurs and can just be felt. To determine the superficial pulse pressures we release pressure until the pulses can no longer be felt, and then increase pressure until they reoccur and can again just be felt. To compensate for the stronger pulse at the middle finger positions, we have only to coordinate finger pressures for all three fingers, utilizing the actual reoccurrence of the pulse beat itself as our guide.

Because of this stronger pulse, the reoccurrence of the beat of the pulse will be felt by the middle finger first, as the finger-tips are either releasing pressure in determining the deep position, or increasing their pressure in determining the superficial position. Therefore, as soon as the reoccurrence of the beat of the pulse is just felt by the tip of the middle finger, hold the middle finger in that exact position, until the reoccurrence is also felt by the other two fingers of that hand as these two fingers continue to release (deep) or increase (superficial) their pressures.

From the instant the reoccurrence of the beat of the pulse is just felt by the other two fingers, any further required increases or decreases in pressure are made with all three fingers at the same time, as a coordinated unit. In this way you have compensated for the fact that less pressure must be exerted by the middle finger than the other two. Note we are not equalizing pressure among the three fingers as some authors suggest---what we are doing is compensating.

A very slight increase or decrease in pressure of all three fingers together as a coordinated unit may be necessary to get a better feeling of the pulse beat and establish the final position to begin the diagnosis. However, the fingers must not be moved or repositioned along the radial artery---especially not "inorder to get a stronger or better feeling" of the pulse beat in any given position.

This then is the pressure that is maintained during the entire study of those particular deep or superficial pulses, with the three fingers of each hand locked in and held as a unit in this fixed position. This is important from that moment on as a greater or lesser amount of pressure by any one finger may affect the 'readings' of the other two fingers.

Start practicing this and add it to the previously outlined procedures for taking your own pulses.

REREAD THIS PAGE SEVERAL TIMES!!

Feel your pulses over and over again! Do this several times each day, until you are able to detect differences. Initially think only of the relative strength of the pulse, beating at each position and depth. Compare the relative strength of the pulse beat of the three deep on one wrist among themselves, and the same for the three superficial pulses on one wrist, again amongst themselves. Then, compare the relative strength of the beat of the pulse of the deep, with the superficial on the same wrist. Next, try to compare the relative strength of the pulse beat of the deep of one wrist to the deep of the other wrist (in otherwords, here you are comparing one deep pulse to five other deep ones) and likewise for the superficial pulses.

Mentally, try to describe the differences you are detecting, which of course must be born in mind from one to the other. The hardest part seems to be remembering what one pulse was like in order to compare it to another pulse or position. Since there are only twelve pulses to consider, a little determination and practice utilizing your memory capabilities will overcome this problem.

Evaluation of the relative strength of the pulses is the best indication as to which meridian is out of balance and needs treatment. Your other pulse diagnosis and traditional diagnostic methods in general will verify this.

Once the basic skills of finger placement and pressures required have been mastered, pulse diagnosis is simply a matter of comparing the strength, rate and if possible some of the characteristics of each of the twelve pulses, with the others. From this we can analyze which meridian(s) require treatment since each pulse position corresponds to one of the twelve major meridians. Not only that, but during treatment, we can check the abnormal pulse(s) every few minutes to determine if the treatment is being effective and hence when to end the treatment.

The next most important factor to determine for pulse diagnosis is the rate of the pulse beat which is taken for both depths of feel and at all positions. To determine the pulse rate, one counts the patient's pulse beats in relation to your own respiration, after having synchronized your rate of breathing to that of the patient's. In this way you can count the number of patient's pulse beats per patient's respiration cycle (one inhalation, one exhalation). The normal adult pulse rate should be between four and five actual pulse beats per respiration cycle (as far as Chinese medical diagnosis is concerned) as averaged through at least nine full respiration cycles. Also compare your normal (non-synchronized) breathing to the patient's, and his pulse beat rate to your normal respiration cycles.

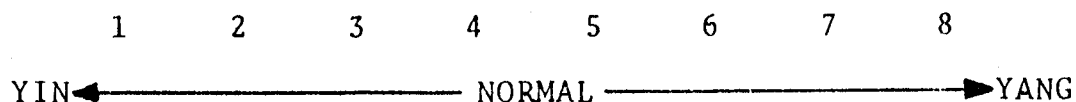
An average pulse rate over five or below four usually indicates an abnormal condition. A pulse rate of three or less and six or more indicates a condition in definite need of treatment. Generally a fast pulse rate of more than five is considered a YANG condition (excess, full) as is both pulse and respiration too rapid though in proper ratio of about four-and-a-half to one.

A slow pulse of three or less is generally considered a YIN condition (deficiency, empty) as is both pulse and respiration too slow though in correct ratio of about four-and-a-half to one. If the pulse in an adult is one and two it may be fatal, and if it is seven or eight it may be very difficult to cure. However, a slow pulse is not always Yin (as in cardiac insufficiency, bradycardia) and a fast pulse is not always Yang (tachycardia, and the pulse of small infants and children) A normal pulse in children aged three to five is somewhere around seven beats per respiration cycle.

The strength and rate of the pulses can be determined and evaluated with only a little amount of practice, and in a normal (proper balance) pulse they should be essentially equal in all positions and at both depths of feel.

After one or two weeks of daily practice, start trying to describe the differences you are detecting, verbally--- start making notes of these differences of strength and of rate. Always record the time and date that you took the pulses (or your patients') in your notes. This will be valuable for future evaluation of your own state of health, and in application of the diagnostic rules and laws.

Record the rate of the pulse beat by number, as taken from the average count in relation to at least nine respiration cycles. A number scale, from one to eight with between four and five as normal is a good way to record this information, as follows:



It is the strength of the pulse above all else that determines the meridian diagnosis. A very strong pulse is considered to mean an excess or fullness in its related meridian---a YANG condition. A very weak pulse is considered to mean a deficiency or emptiness in its related meridian---a YIN condition. A very good way to record the relative strength of each pulse (that is whether it is felt to be normal, strong or weak) uses + or - symbols with zero (0) reflecting normal, as follows:

+++	Very, very strong, extremely above normal	EXCESS ↑ ↓ DEFICIENCY
++	Very strong, very much above normal	
+	Strong, above normal, not too abnormal	
0	NORMAL (in balance)	
-	Weak, below normal, not too abnormal	
--	Very weak, very much below normal	
---	Very, very weak, extremely below normal	

Then, try to discern more than just the strength and rate of the pulse beat---look for any differing characteristics or qualities in each position and depth of feel, especially the degree of suppleness of the arteries themselves. When normal, the pulse will be smooth and calm, rhythmic and regular, freely flowing without hesitation, elastic, compressible, but with a certain amount of tension.

With practice and experience in taking the pulses, you will notice different characteristics or qualities, such as: intermittent, irregular, hesitant, tense, rigid, hard, brittle, feeble, lack of resistance, slippery, choppy, floating, sunken, rough. The 'doctors' of the Orient developed the art of pulse diagnosis to a point which is hardly imaginable today. They could distinguish the finest and most delicate nuances, noting nearly fifty qualities for a single pulse, each indicative of a specific type of illness.

However, it is not necessary to achieve such a skill in detecting characteristics or qualities in order to arrive at a successful diagnosis. Rather than anything else, these characteristics or qualities tend to reflect or mirror the actual condition of the organs, functions or structures controlled by that particular meridian. Their prime usefulness is in determining the progress and future course of the illness rather than in establishing an actual diagnosis.

But, do try to distinguish if possible the degree of suppleness of the arteries themselves at each pulse site. For example, elasticity in the arteries themselves usually signifies that the condition will be relatively easy to cure. On the otherhand, hard, rigid, brittle arteries are indicative of very difficult to cure problems. In fact, any dilations of the radial artery, tumors, build-up or hard patches [atheromatous plaque or aneurism] located specifically at a particular pulse position, indicates very serious and advanced imbalance in one or both of those particular meridians.

Strive towards being able to detect the 'differences' you want to determine---mainly strength, rate and suppleness of the artery itself---on the very first try at each position and depth of feel. Do not jump back and forth in your mind from one position to the next. Follow an orderly pattern of taking the pulses, and get to the point where you don't have to keep going back to 'remember' what a previously felt pulse was like. Pulse diagnosis is a very subjective procedure, and one of the greatest errors made by beginners and advanced alike, is to take too long, or make too many tries at each patient's pulses. With a little practice you should be able to get the information you need on the first attempt, in a matter of ten minutes or so. Usually this first attempt is still the best. The longer you work at it or the more times you repeat the procedure, the bigger the chance the pulses will change or lead you astray.

Some students seem to have a natural ability for this and with others it takes longer (more practice). For now, do not try to interpret any differences you may feel. It is sufficient that you are able to detect differences. Do not become anxious or overly concerned if one or more of the twelve pulses is hardly discernible, or if one is much stronger than you would expect it to be. This does not necessarily mean a disturbance, but rather may indicate that a particular pulse in relation to other factors is just what it should be.

Although an experienced, traditional diagnostician can take the pulses accurately at any time of the day or night, the best time of day for beginners to make a pulse diagnosis is in the morning. Say halfway between breakfast and lunch at which time the pulses are more stable and most easily 'read'. If at all possible, try to practice taking your pulses in the morning. Remember to record the time and date in your notes each time you take your pulses!

Can you recall, back in Lesson One we spoke of what is seen of acupuncture today in most modern 'text books', being only a fossil of the giant dinosaur once called acupuncture? Yes, acupuncture has become 'fossilized' to the point where some of the theory, background and methods of it have been almost forgotten. Furthermore, as far as traditional pulse diagnosis is concerned, some recent interpretations and arbitrary modifications have confused even the correspondencies between the organs and the locations of the pulses on the left and right wrists.

Almost all schools of thought in paying lip service to Yin/Yang philosophy, seem to have forgotten one fundamental rule: In pulse diagnosis one takes the pulses of the right hand of a woman first, and the pulses of the left hand of a man first. This may seem like a very minor detail, but rest assured it does have diagnostic significance. If one forgets this rule, all diagnosis and treatments resulting from diagnosis may be simply speculative.

Yang, the male principle, is represented by the left hand and Yin, the female principle, is represented by the right hand. Normally, the pulses on the left hand of a man will reveal more about his illnesses than those on the right. Similarly, the pulses on the right hand of a woman will usually reveal more about her illnesses than those on the left. However, since both Yin and Yang are represented in both sexes, it is still necessary to consult the pulses of both hands in order to make a complete diagnosis.

Some schools of thought, especially among the traditional Japanese, have taken this to mean that the entire pulses of man and woman are on opposite wrists. In other words that the pulse positions of a man's left wrist correspond to the pulse positions of a woman's right wrist, and so on. However, there is no support for this extreme interpretation in any of the earlier classical Chinese literature.

HOW TO TAKE A PATIENT'S PULSES

PATIENT: The patient should be comfortably seated and allowed to rest for ten minutes or more, with the least possible movement. Take advantage of the rest period for observation and interrogation of the patient---two of the other diagnostic methods discussed in a later lesson.

The reason for the rest period is that the patient must be calm and relaxed as the tenser the patient is the more it shows up in the pulses. Naturally any undue excitement, emotional stress, fear, anger, physical exertion (ie. climbing stairs, running, etc.) might tend to give misleading pulse readings. In these cases a rest period of a half hour or more is best, even lying down on a couch would help.

Excessive food or drink, alcohol, and drugs can also cause false interpretations. Question the patient about these. It would be a waste of time to diagnose the pulses within two hours after a heavy meal as this would affect the stomach pulse greatly (one of the more important in an overall diagnosis).

The practitioner himself should be relaxed and calm in order to be receptive and concentrate on what the pulses are telling him. The examination environment must be quiet and when diagnosing the pulses there must be silence both on the part of the patient and the practitioner.

It must also be noted that there is a certain percentage of patients with whom it is not possible to use pulse diagnosis because of pathological or anatomical reasons. Included in this group are those with abnormalities in the wrist structure, excessive scar tissue or hardening of the arteries at the pulse sites, amputations of the upper limbs, and those with highly distorted pulse readings. This percentage can run as high as twenty-five percent in a normal practice. These patients will have to be treated by symptomatic formula as opposed to traditional individualized treatment.

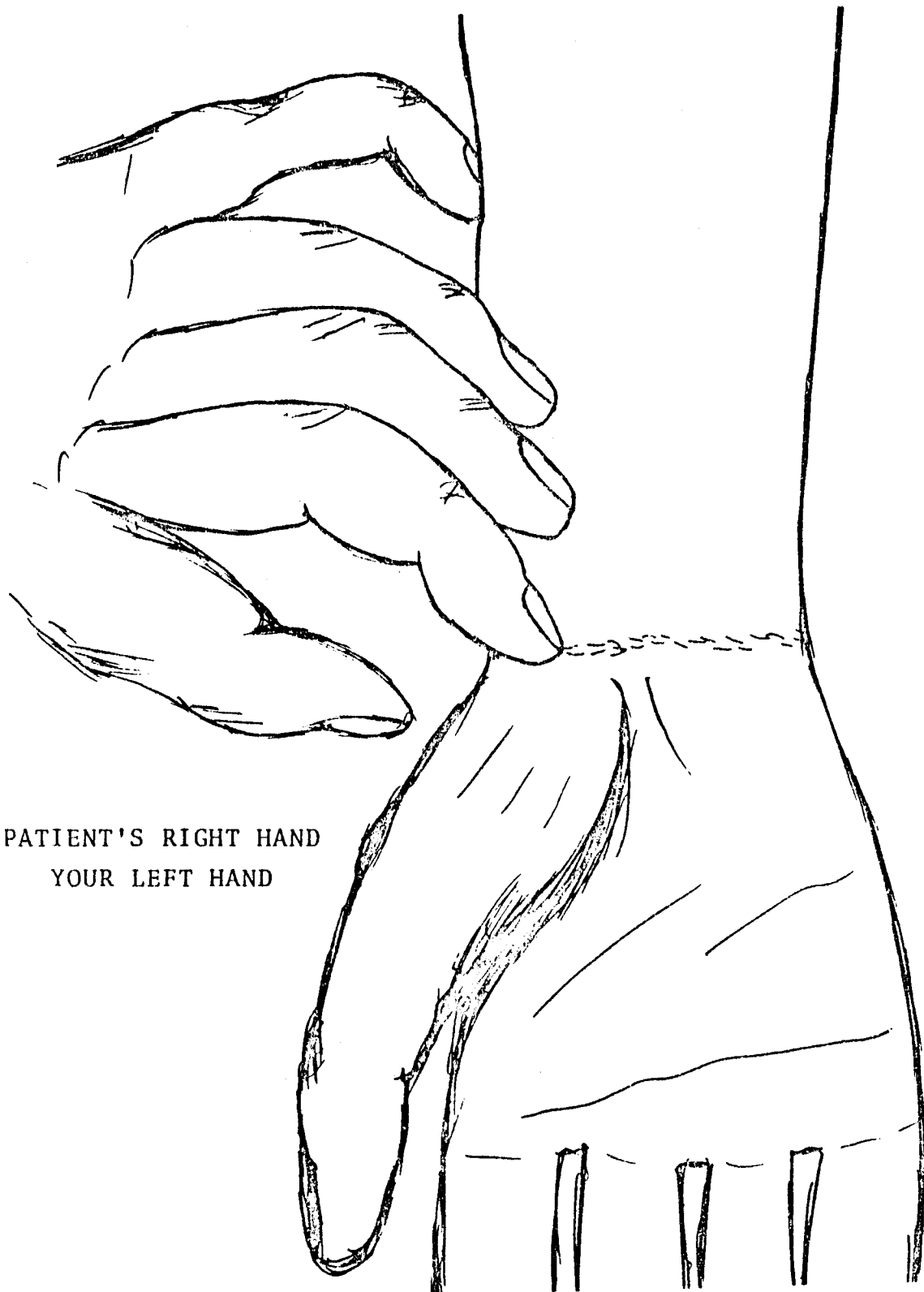
POSITION: It is of utmost importance that the patient be in proper position in regard to that of the practitioner. It is best to have the patient facing you across a small desk or table, with forearms extended and palms upward. A rolling typewriter stand is ideal for this, and can also be used to hold acupuncture supplies during actual treatment. Place a small pad (cushion) under the backs of the patient's forearms and wrists, so that the hands themselves are drooped slightly downwards and resting on the surface of the desk or table. This makes it easier to feel the pulses.

If the patient is too ill to sit up for the pulse examination, the practitioner stands beside the patient at his bedside and takes each hand's pulses separately. Here you hold the patient's left hand in your left hand, bending the patient's hand back slightly (similar to the effect of a pad under the patient's forearm), and use your right hand to feel his left pulses. Vice versa for the patient's right hand pulses.

Because of their tiny wrists, it is rather difficult to take the pulse of very small infants. The examiner uses only one finger placed on the middle position and rotates it slightly to feel the distal and proximal positions.

TAKING THE PULSES: Facing the patient, take his left pulse with your right hand, and his right pulse with your left hand. [See diagram opposite page]. First locate the middle pulse position on both his right and left wrists. Place the tip of the middle finger of your appropriate hand on his radial artery at the level of the radial styloid. Then position the index and ring fingers of each hand. Wherever possible FULLY POSITION YOUR FINGERS ON BOTH WRISTS RIGHT FROM THE START. Remember the index finger is used to feel the distal pulse (closest to the fingers) and the ring finger for the proximal pulse (furthest from the fingers).

HOW TO FEEL A PATIENT'S PULSES



SPACING YOUR FINGERS: The size of your fingers and the patient's wrist (your wrist when taking your own pulses) will determine the spacing of your three fingers---how far apart they must be to be properly positioned along the radial artery for each of the three pulse positions. A very large wrist would require the fingers to be spaced apart somewhat, while a very small wrist would require the fingers to be quite close together. In practice, you will find that the length of radial artery for each pulse position usually equals the width of the tip of the patient's forefinger. Classically, the total length of radial artery used for pulse diagnosis is almost two finger pousse.

TAKE YOUR OWN PULSES FIRST: Quickly take your own pulses and record any abnormalities in your notes. Provided you are a model of good health, this will give you more material to compare the final outcome of the patient's diagnosis with. If you are not a model of good health, you will note what your own abnormalities are and take this into consideration when analyzing the patient's pulses.

OVERALL YIN/YANG ASSESSMENT: The next step is to get an overall assessment of the patient's Yin/Yang balance. Position your six fingers appropriately on both the patient's wrists. Locate the proper pressure for the deep pulses on both the patient's wrists. If your patient is a male think only about the pulses on his left wrist first. If your patient is a female, think only about the pulses on her right wrist first. Compare only the total strength of the beat of the pulse (as felt by all the fingers on each wrist) of the deep pulses on the first wrist against the deep pulses on the opposite wrist, especially noting the distal deep on each side (closest to the fingers). Also compare the distal deep position to the proximal deep position on each individual wrist (but not against the opposite wrist). Repeat these steps back and forth if necessary.

In pure traditional Chinese medical thought, a woman's right deep pulses should be stronger than her left deep pulses. A man's left deep pulses should be stronger than his right deep pulses. In a man the deep distal pulses should be stronger than the deep proximal. In a woman the deep proximal pulses should be stronger than the deep distal. [Note: Western thinking is that the pulses on the left are generally stronger than those on the right, regardless of sex.]

You already know that a woman should show predominantly Yin characteristics, and a man should show predominantly Yang characteristics. In doing an overall Yin/Yang assessment first, you can determine if the basic Yin/Yang balance is as it should be, or if there is a drastic imbalance in favour of Yin, or in favour of the Yang predominance, especially if the outcome is contrary to Yin (woman), Yang (man) principles. This then is the start of your total diagnosis.

THE DEEP PULSES: As soon as you have completed your Overall Yin/Yang Assessment, and if possible, with your fingers still in the deep positions on both wrists, start analyzing the individual deep pulses. The deep pulses are the most important and fundamental ones.

Again, start with the right pulses of a woman and the left pulses of a man. Start with the position closest to the fingers and work towards the position furthest from the fingers, mentally taking each position in turn. Concentrate and carefully note the strength (strong, normal or weak), rate and if possible some of the characteristics (qualities such as the suppleness of the artery) of each of the deep pulses' beats in comparison with the two other deep pulses on that same wrist.

Do not do the superficial pulses at this time. Instead do the same for the deep pulses of the opposite wrist, or you will end up being totally confused.

SUPERFICIAL PULSES: If possible, as soon as you have finished with all six deep pulses, go right into the lighter pressure required for the superficial pulses. Again, start with the right pulses of a woman and the left pulses of a man. Start with the position nearest the fingers, and work towards the position furthest from the fingers, taking each one in turn.

Concentrate and carefully analyze each one individually, mentally noting the strength and rate of the pulse beat, and if possible some of the qualities such as arterial suppleness. Do this for each of the superficial pulses comparing each with the other two superficial pulses on that same wrist. Then go on and do the same for the superficial pulses of the opposite wrist.

SUPERFICIAL/DEEP: Next, compare the superficial with the deep pulse at each of the six positions. Again, concentrate and carefully note the strength, rate and characteristics of the pulse beats at the two depths of feel on each wrist in all three positions. Start with the right wrist of a woman and the left wrist of a man, and then when you have completely finished your analysis of the first wrist, go on and do the same for the opposite wrist.

COMPARISON: NOW, WRITE DOWN YOUR FINDINGS as discussed previously. Possibly, take your own pulses again and record the results. The beginner will probably have to stop after each of the major steps (Overall, Deep, and Superficial) in order to jot down his findings, and then assume the proper position again and continue with the next step. However, do not stop to make notes during a step (ie. left and right deep pulses) under any circumstances. Notice also that we are not jumping back and forth between one wrist and the other in any step except overall Yin/Yang assessment. Compare only what you find on one wrist with what you find on the other wrist after you have finished your entire diagnosis.

COMPARISON (CONTINUED): At first, you probably will have to go through the entire procedure outlined above starting right from the Overall Yin/Yang Assessment, several times, with each patient, before you have enough material gathered to make a differential comparison of the 'abnormalities' found in any or some of the twelve pulse positions. With practice, one can quite quickly get to that ideal point of only having to go through this whole procedure once, as explained earlier.

In all but the most healthy patients you will be able to find at least one or two pulse positions that consistently 'stand out' above the rest. In the case of pronounced meridian imbalance many more abnormalities will be apparent. Consult your notes and findings, and compare them to your own pulses (hopefully healthy and normal) to determine the relative extent and location (meridian) of abnormalities as diagnosed in the pulse factors. If symptoms vary too greatly from pulse results, schedule the patient for another pulse diagnosis session at a different time, at a later date.

Before arriving at your final diagnosis based on the pulses you must take into consideration the patient's age, physical condition, symptoms, medical history, and all the objective and subjective findings of your other diagnostic methods, in order to determine the relative importance of the pulses themselves. For example: Someone who is very active and energetic may have a stronger pulse than someone who is slow and not very active. In this case a difference from normal in the pulses may not be abnormal.

Some general pulse diagnosis considerations are discussed in the balance of this lesson. In a later lesson, we will go into how to apply this information in treatment determination according to the rules and laws of acupuncture, acu-pressure and moxibustion.

HOW THE TWELVE PULSES CORRESPOND TO THE TWELVE MAIN MERIDIANS

ALL DEEP PULSES CORRESPOND TO YIN MERIDIANS
 ALL SUPERFICIAL PULSES CORRESPOND TO YANG MERIDIANS

YOUR OWN PULSES

LEFT HAND			RIGHT HAND	
<u>SUPERFICIAL</u>	<u>DEEP</u>	<u>POSITION</u>	<u>DEEP</u>	<u>SUPERFICIAL</u>
SI	He	DISTAL	Lu	LI
GB	Li	MIDDLE	Sp	St
Bl	Ki	PROXIMAL	EH	TB

FACING YOUR PATIENT

RIGHT HAND			LEFT HAND	
<u>SUPERFICIAL</u>	<u>DEEP</u>	<u>POSITION</u>	<u>DEEP</u>	<u>SUPERFICIAL</u>
TB	EH	PROXIMAL	Ki	Bl
St	Sp	MIDDLE	Li	GB
LI	Lu	DISTAL	He	SI

ALL DEEP PULSES RELATE TO YIN ORGANS
 ALL SUPERFICIAL PULSES RELATE TO YANG ORGANS

NOTE: THIS CHART ILLUSTRATES HOW THE TWELVE PULSES CORRESPOND TO THE TWELVE MAIN MERIDIANS. IT MUST BE MEMORIZED AND LEARNED SO THOROUGHLY, THAT THERE IS NEVER ANY DOUBT IN YOUR MIND AS TO WHICH MERIDIAN'S PULSE YOU ARE FEELING.

From our previous lessons, we know that in good health there is perfect harmony and an unobstructed flow of "ch'i" energy throughout the body in a set cycle. Any interference or disequilibrium of this ch'i energy flow will result in disharmony within this cycle, and eventually ill health. From this lesson we know that the state of harmony or disharmony of each of the twelve main meridians is reflected in one of the twelve pulse positions or depths. The twelve pulses can be considered as the outer expressions of the harmony or disharmony (balance or imbalance) existing within these twelve main meridians.

Each of the twelve pulses then, can tell us if the energy within the meridian it represents is in balance or out of balance---if it is normal, 'deficient' or in 'excess', and hence which meridians need treatment. This of course is the basic purpose of pulse diagnosis (or any acupuncture diagnosis for that matter)---to locate the meridian(s) in which ch'i energy is out of balance. Pulse diagnosis is astonishingly accurate in determining this to the point of being able to foretell future illnesses (detect meridians which are just becoming abnormal) before any overt symptoms have appeared.

If the pulse of a particular meridian is notably weaker than the average for that particular patient, the meridian associated with that pulse is said to be deficient in ch'i (emptiness, a void of ch'i exists) energy. If the pulse of a particular meridian is notably stronger than the average for that particular patient, it is said to have an excess of ch'i energy (fullness, obstruction of energy flow). This basically is the information you need, because it tells you what action you will have to take to treat the problem---add more energy (stimulate) or take away excess energy (sedate). It also gives you valuable information concerning which meridian(s) you will have to take this appropriate action on.

With this information, you can now plan your acupuncture treatment, because you know which meridian(s) are out of balance. Perhaps only one meridian is radically out of balance and then the treatment plan is greatly simplified. Usually though, more than one meridian is out of balance, so you can start with the one that is most out of balance and treat it first. Or, you can plan your treatments to affect several of the out of balance meridians at the same time. By rechecking the 'abnormal' pulses frequently during treatment you can determine if the treatment plan is being effective and when to end the treatment, or start on the next out of balance meridian, and so on.


However, it is not quite as simple as all the above sounds. First of all, as a 'beginner' one would never rely solely on the pulses alone as the only diagnostic method of establishing meridian imbalance. In a later lesson, we will cover the remaining traditional diagnostic methods available to the acupuncturist. Also, a lesson covers the more modern determination of meridian imbalance through the use of the latest acupuncture instrumentation and meridian balance meters (including needle-less electronic treatments).

Secondly, just because one or more meridians are radically out of balance at any given moment, does not mean that there is disharmony within the body (or illness). It may well mean that the particular meridian (pulse) is at that hour of the day, at that season of the year, and in relation to many other 'circumstances', just what it should be. This brings us to the 'laws or rules' of acupuncture and acu-pressure diagnosis and their applications. Some of these are covered in the very next lesson set.

This is why we told you not to be overly concerned if you found one or more of your pulses to be exceptionally strong, or hardly discernible at all. It may well be that the answer lies in one of the 'rules or laws' covered in the next few lessons.

With a sincere desire, a certain amount of sensitivity and enough practice, anyone can learn the art and science of the twelve radial pulses. After only a few hours practice, the average person can do a creditable job of comparing the relative strength and rate of all pulse positions. What we have covered in this lesson on pulse diagnosis will be more than sufficient to get you started and on the right track.

In the following lessons we will learn how to interpret the pulse diagnosis and how to apply it in treatment. Some of the finer points of pulse diagnosis, impossible to teach in a written format, will be covered in our short seminars for advanced students and graduates. From our experience with the seminars two main things are evident that should be mentioned here: Most students are taking far too long to do the complete procedure, and are finding too many 'abnormalities' from it.

If one is thoroughly familiar with Yin/Yang philosophy, relatively little experience in pulse diagnosis is needed to enable you to recognize a Yin or a Yang condition. With either Yin or Yang determined, one will then know for example, whether to sedate or tonify, and excellent use can be made of the purely symptomatic modern treatment formulas and point indications given in this course. 

Or, by combining that determined factor with some of the other forms of Oriental diagnosis (covered later in the course) or even combined to a certain extent with the results of Western diagnosis, a more effective, traditional approach may be taken in choice of acu-pressure and acupuncture points and treatment designed for each individual case.

With some further experience you will start to distinguish the intricate subtleties of the different characteristics and qualities of the pulses. From this you can obtain an increasingly clearer, more complete picture of the illnesses and 'zero-in' on the exact points to be treated.

However, it requires a great deal of experience in the taking of the Chinese pulses, combined with a high degree of natural sensitivity, careful judgement, developed intuition and faith in oneself, in order to rely on pulse diagnosis as the sole diagnostic method used. This can come only through accumulated 'feed-back' from many years of results in a clinical situation, or from a lengthy period of instruction with a master tutor.

Ideally it would be best if the beginner, on his own, could only practice his pulse diagnosis on healthy patients first, to get a good idea of what a 'normal' set of pulses is like. The second phase would then be practicing pulse diagnosis only on those patients whose illnesses are clearly defined or previously established by other diagnostic methods. In this way the student would learn to recognize specific differences in relation to given conditions. The third step would be to be able to diagnose all new patients using the pulses before taking up their symptoms and complaints. Unfortunately, this is usually not possible in practice and with so many who are suffering and in need of immediate aid.

If the student intends to practice acupuncture, skill in 'reading' the pulses will be important. Imagine being able to diagnose accurately with only a simple touch of the finger-tips! Is the effort and practice worth it to you? To your friends, relatives and patients? Classic literature states: "If you believe there is a pulse, there will be one. If you do not believe it, there will be none." You must personally feel deeply convinced that the pulse diagnosis technique makes sense, and that there actually are two depths of feel at three different positions on each wrist, as the Chinese have believed for thousands of years and still to this very day, believe and utilize daily.

All questions must be attempted. Return three pages of completed question paper to Institute for evaluation (use pre-gummed address label). The box at bottom of this page is a return section for use with a window envelope, please fill it in neatly. Use a separate piece of paper to ask questions.

1. What three main things are we trying to determine with pulse diagnosis from the strength, rate and characteristics?

2. Give two reasons why Western physicians (M.D.'s) would perhaps be better off taking the pulse (singular, as in Western medical manner) at the patient's left wrist instead of the right wrist.

3. What can you see concerning the meridians in regard to the relationship of the deep pulse to the superficial pulse at the same position?

4. What can you see that the four middle pulse positions (one superficial, one deep, on both wrists) all have in common?

CONTINUED ON NEXT PAGE . . .

	NAME
	STREET
	CITY
	STATE & ZIP CODE
	DATE: _____
	STUDENTS SIGNATURE _____

PRINT NAME AND ADDRESS -- DO NOT WRITE IT

SEND ME LESSONS _____ & _____ \$ _____ ENCLOSED

5. Explain exactly why the middle finger (once in proper position and exerting the proper amount of pressure) is actually applying less pressure than the other two fingers of each hand in feeling the deep pulses---even though we do not release any further pressure on it alone, after just feeling the reoccurrence of the pulse beat. [Continue answer on other side of page if necessary.]
6. Circle which of the following is felt as the stronger of the two in each set, in regard to your own pulses. Do them all within a fifteen minute period and record the approximate time of taking (specify AM or PM).

He compared to Ki

He compared to Lu

Lu compared to EH

Ki compared to EH

APPROXIMATE TIME OF TAKING: _____ M

7. Check the following on yourself and record below for each the strength and rate of pulse, using the methods described on page 21 of this lesson. DON'T GUESS!

(a) Bladder pulse before and after urination:

BEFORE _____ AFTER _____

(b) Stomach pulse before and after a heavy meal:

BEFORE _____ AFTER _____

(c) The Large Intestine pulse before and after a bowel movement (defecation):

BEFORE _____ AFTER _____

8. A student with above average health, submitted the following pulse readings in answer to the next question. From what you have learned so far in this lesson, of which sex is the student, and what else would this information tell you about that student? THINK!!!

Lu	Sp	EH	He	Li	Ki
+	+++	++	0	+++	+
LI	St	TB	SI	GB	B1
0	+++	+	0	+++	+

PULSE RATE: Between 4 and 5 for all positions & depths

CHARACTERISTICS: Pulse fairly supple at all positions and seems to be very regular also.

9. Take your own pulse readings once very carefully (both strength and rate for each of the twelve positions), and record your findings on the other side of this page, in the manner described on page 21 of this lesson.

SUBMIT ALL THREE QUESTION PAPER PAGES TOGETHER FOR GRADING

LESSON 7 - QUESTION PAPER ANSWERS

#1. Total Value . . . 3 Marks (1 mark for each correct answer).

The three main things we are trying to determine with pulse diagnosis are:

- (1) Which meridian(s) require treatment, if any. By this is meant that we try to discover any imbalance either within or between the meridians.
- (2) What method of treatment to use (tonify or sedate). We determine this by feeling whether a pulse is reading excess or deficient. [See page 7, para. 3, and page 33. This page reference also applies to (1) above.]
- (3) Whether treatment is effective. This is done during the actual treatment. (See page 19, para. 4, and page 34)

We determine all three of these things by feeling and comparing the relative strength, rate and characteristics (qualities) of each pulse. From (1) and (2) above, we also gain a knowledge of the condition of each individual organ or function. From (3), we know when the meridian is back to normal balance and thus when to end the treatment, or when we can begin treatment on the other out of balance meridians if other imbalances exist.

#2. Total Value . . . 2 Marks (1 mark for each correct reason).

In Western medicine, the physician generally takes the pulse only to get an indication of the strength of the heart and the circulation. Even though this is all they usually wish to determine, they would perhaps be better off taking this reading from the left wrist because:

- (1) The He pulse is traditionally felt at the left wrist (deep distal position) by other cultures. [Which side of body is most of heart's mass located?]
- (2) Westerners generally consider the left pulse to be stronger than the right, regardless of sex of patient. (See Page 29, para. 1)

#3. Total Value . . . 3 Marks.

The important relationship you should have noticed about the pulses at the same position is that they are adjacent (next to each other) in the classical order of ch'i flow (2 Marks). Also, the deep pulses are always a yin meridian, while the superficial pulses are yang meridians. As well, both deep and superficial pulses at one position are either hand or foot meridians. (One mark total for one or both of these last two underscored reasons). The clinical significance of these relationships will become clearer in later lessons.

#4. Total Value . . . 2 Marks.

The four middle pulses all represent foot meridians (For 2 marks). They are also generally felt first as being stronger than the others (1 mark, unless you got 2 for this question already). Some students say that they all perform a function in the digestion of food, but we know from Lessons 2 & 5 that this is the main function of only the GB and St (Yang meridians' functions).

#5. Total Value . . . 2 Marks.

The important thing to notice here is that the question asks "WHY", not "HOW". The middle finger is exerting less pressure than the other two fingers because at the middle position the radial artery is directly over top of the styloid process (bone) and thus because of the firmer background there, less pressure is required in the first place to compress the artery. [Required for full marks.] See page 17, para. 1. If you said that the pulse is easier to feel, or stronger, this is only good for one mark, because you didn't explain why it is stronger.

LESSON 7 - QUESTION PAPER ANSWERS (Page Two)

#6. Total Value . . . 2 Marks (One-half mark for each correct set of the four).

The readings on this question will of course, vary from person to person, but generally you should have found that on a male, the distal pulses were a bit stronger than the proximal pulses, and the left pulses were a bit stronger than the right pulses. In a female, this will be reversed. [See Page 29, para. 1, this Lesson.]

If you did not find this to be so in at least two, but more likely three of the readings (sets), re-check them carefully. The time of day that you took the readings will be a factor, so after you study Lesson 8, it would be a good idea to check these again and see how the new information may apply.

#7. Total Value . . . 3 Marks (One-half mark for each correctly recorded pulse).

In order to get full marks for each reading you had to have recorded the strength and rate BOTH BEFORE AND AFTER. The strength should be recorded as shown on Page 21, para. 3 [+ , 0 , - , etc.], and the rate recorded as the number of beats per respiration cycle [ie. 4 , 5 , 6] as shown on Page 21, para. 2 .

These readings may also vary from person to person, but in most cases, the Yang meridians' organs will have a stronger reading when they are being used. That is, Bl & LI should read stronger before, and St should read stronger after.

Readings should look something like this:

Bl	- Before	+	5	After	0	4½
St	- Before	+	4	After	++	5
LI	- Before	++	5	After	0	4

IF YOU DID NOT FIND THIS TO BE THE CASE IN ALL THREE, RE-CHECK THEM CAREFULLY!

#8. Total Value . . . 3 Marks.

The student is FEMALE (1 Mark) because the right pulses were read first, and also because the proximal pulses are stronger than the distal pulses, and the right deep pulses are stronger than the left deep.

Now, we know that the student is enjoying above average health, yet we see that four of her pulses are showing an extremely strong reading. Further examination reveals that it is the four middle pulses that are reading too strong. This should immediately indicate that this student did not know how to properly compensate for the middle pulse feeling the strongest. (Two marks and required for full marks).

If you did not get this, then the next logical (but incorrect) conclusions are that either she is a very active girl, or she has just eaten a large meal. However, if you had thought about these a bit more, you would have realized that if she was very active, then her He pulse would probably be reading a bit stronger than it is. If she had just eaten a large meal, then her SI pulse for example, might be reading stronger as well, as it is involved in the digestive process. Either one or both of these reasons however is worth a total of one mark, because you were at least thinking of the possibilities.

Anything suggesting that she had any kind of an illness, either present or pending is totally wrong. You should realize that to have four such abnormal pulses, at least some symptoms would be manifesting themselves in a physical form, and she would not be in good health.

LESSON 7 - QUESTION PAPER ANSWERS (Page Three)

#9. Total Value . . . 5 Marks (One mark for each correct procedure.)

These are the five procedures that must be followed when taking the pulses:

- (1) Record the time and date of the reading. (Page 21, para. 1)
- (2) Record the proper hand first for the sex of patient. (Page 24, para. 2)
- (3) Record the deep pulses first. (Page 14, para. 1)
- (4) Record the rate [at least "overall rate"]. (Page 21, para. 2)
- (5) Record the strength. (Page 21, para. 3)

This is an example of what a correctly recorded reading should look like:

December 20, 1974 --- 1.00 P.M.

Rate: 5 to 6 at all positions. [Overall or average rate here.
Rate can be recorded separately for each pulse position
and depth underneath the strength recording.]

He	Li	Ki	Lu	Sp	EH
+	-	0	-	0	-
SI	GB	B1	LI	St	TB
++	-	+	0	+	0

This is of course, a reading from a male (left recorded first). A female would have had her right pulses recorded first. The correct form for recording the pulses was demonstrated in Question 8 of this Lesson's Question Paper Sheet. Notation of the characteristics (qualities) of the different pulses is not required at this time. The importance of recording the pulses in this exact procedure or manner will become clear after we study more diagnostic methods and acupuncture treatment laws or rules.

The value of all the marks in this lesson adds up to a possible total of twenty-five. If you just barely managed to get a Satisfactory Comprehension evaluation (12 to 13 marks) you should spend considerable time reviewing this lesson in light of the answers given on these pages. If you honestly could give yourself at least 17 to 18 marks (around 70% or better) you have done well in this lesson, and can be proud of the fact, for only a small percentage of students ever get more than 20 marks on this lesson. Not only is this lesson one of the longest in the program but also one of the ones students find the most difficulty with.