

“Pulse Course” Overview

This course is designed to establish familiarity with the art of pulse assessment. Further, it is designed to build understanding of the theory surrounding its use. The technique, itself, requires skill of palpation, keen concentration and attention, and much practice. Making sense or use of this information requires a thorough understanding of structure and function as described by Āyurveda—tridoṣa and sapta dhātu theory.

One salient feature of this course is its emphasis on the concept of balance—what it entails conceptually and how this is assessed practically. Thus it will not be enough for the student to learn the manifestations of imbalance, but he or she must also know balance in the pulse to be more than the absence of imbalance. We will strive to weave through the entire pulse system/course this theme of balance and its manifestations.

The successful student of this art will engage in voluminous hours of practice—on oneself and on others outside of class. This course is more a theory class than a practicum lab, although it is recognized that one must have practical hands-on experience for the theory to be meaningful. As a matter of learning one should know one’s own pulse first and then advance to others’ pulses. “Grading” will be in the form of a demonstrated skill by the end of the course; i.e., if one can accurately determine the various aspects of the pulse this will be reflected in the client assessment part of the curriculum.

This course has 5 modules according to our projection; each lesson will consider a different level or feature of the pulse—

1. general pulse features
2. superficial level or present state (vikṛti)
3. deep level or constitution (prakṛti)
4. organ pulses, sub-doṣa pulses
5. tissue pulses.

There are experience sheets provided designed to facilitate record-keeping while practicing each and all of these categories.

Lesson I

The Concept of Nadi—related themes defining and expanding the concept functionally:

- Nādi = the river of life, prāṇa, consciousness; flows in the subcutaneous tissues; prāṇic vibrations conducted through the nervous system
- Snayu = tendonous or ligament supporting upadhātu which is hidden in subcutaneous tissue
- Tantuki = thread of life, feelings, emotions felt within the pulse
- Hamsa = male swan ; feeds only on milk on the water’s surface suggesting it drinks only essence of life; so ham (ego = Consciousness in and ham = ego out); prāṇa rises from the coccyx (lower cakṛa symbolic of the hamsa and Shakti) and out of the body (Shiva connected implicitly with this flow of prāṇa)
- Dhamani = dhum—the sound of the beating heart (buk the alternative) considered the primordial sound equivalent to heart.
- Dhamani = the vibration of prāṇa moving thru pulse
- Dharani = holding/sustaining; the organs and tissues support life and are reported in the pulse; the pulse sustains the life
- Dhārā = a flow, continuously flowing, flow of Consciousness
- Saritā = river (of daily living)
- Prāṇa vahini = that which is the vital force of life
 - May vary with inspiration (higher) and expiration (lower)
 - Signals balance of male and female energy with predominance of the left and right nostril breath

- Kundalini = rooted at base of spine but flows through the pulse in ordinary people and in the spinal channels (suṣumna, ida, and pingala) in a yogi
- Marma = varma or vital energy point connecting to interior physiology useful in diagnosis, treatment, surgery (avoidance), and martial arts (wounding/killing)
- Viśvanādi = the universe has a pulse implying the theme of one with everything; the planets themselves are energetic symbols of tissues of the body (Jupiter, Saturn, Mercury, Mars = fluids, fat, bones, nervous tissue, blood, liver, and spleen, etc.); the pattern of breath changes every 90' influencing physiology through the elemental predominance and yielding tranquility while in the space element mode;
- Jivana Jñāna = knowledge of life
- Gurunādi = master, teacher, enlightened person who opens the kundalini causing it to flow and bring enlightenment to the student, follower, etc.
- Prāṇācarya = healing through the flow of prāṇa, not herbs; ex. a Dhanvantari can feel another's pulse by feeling his own
- Srotas = channel; Sanskrit root = sru = to flow;
 - srava = flowing;
 - sravnat srotamsi = the course or current of nutrition in the body
 - saranāt sirā = vessel through which something moves or goes
 - dhamanāt dhamanya = (associated with) blowing or puffing, pulsating, passing impulses
 - Production of, diminution of all (corporeal) entities in the body is dependent on (the normal function of) the srotamsi. Production of any new substance is the main function of srotas—not only to carry and distribute—it must form the substance.
 - In a sense srotamsi are termed as the passages for the flow of dhatus that are undergoing transformation. As far as channel is concerned whatever is necessary for flow that is the srotas.

Historical Notes: Śārṅgadhara describes characteristics of increased vāta, pitta, and kapha—

1. movement of leech or snake (vāta);
2. sparrow, crow, frog (pitta);
3. swan or pigeon (kapha).
 - In case of all increased it will feel as the movement of a bustard quail, gray partridge, and button quail.
 - If two doṣas only are increased then the pulse will feel at times slow and at others very fast.
 - The signal signs of impending death are a pulse that has changed (prakṛti), stops and starts, thin / feeble, and cold.
 - In case of fever, in lust, and in anger it feels warm and fast.
 - Pulse slows in worry and fear.
 - In dull agni / slow digestion and dhātu emaciation pulse feels slow and feeble.
 - When vessel full the pulse will feel warm.
 - Sāma condition shows pulse to be hard and tense.
 - When digestion is strong pulse will be light and quick.
 - During hunger the pulse will tend to erratic and becomes stable after eating.
 - During health pulse is steady and forceful.

The Technique—Superficial

Structure and Function of Assessment Techniques –arteries vs. veins

System Approach to Pulse Taking

Types of Pulses in the Body- etc. Specific meanings in that area of anatomy, physiology

- Radial—3 doṣas, 7 dhātus, 3 malas, SRT, manas, PTO, enlightenment, graharoga, gandakala
- Temporal—headaches (Pv Sp)

- Carotid—thyroid (Uv Pv Ak Rp)
- Brachial—Sv Pp Kk
- Axillary—Pv Vv
- Femoral—Av Pp Rp ŚVS
- Pedalis dorsum—Av Vv
- Nabhi—Sv Pp Kk
- Inguinal--AvVv

The technique

- One hand or two?
- Left or right?
- Positioning of Fingers—Proximal/Distal, Radial Process

The Attributes—Understanding the Pulse Theory--

- V = light, quick, erratic, horizontal-sideways, diffuse/subtle, full
- P = light, mobile, regular, vertical, strong, sharp
- K = heavy, slow, steady, horizontal-linear, dull, smooth
- The Concept of Balance

Practice—Individual feels own radial for

- Speed
- Rhythm
- Strength
- Volume
- Flexibility/Hardness
- Differences between V—P P—K
- Practice discerning the above attributes in the superficial
- Evaluate superficial pulse by gunas, position/count, and strength
- Snake, frog, swan—concept of balance superficial, temporal, quantitative

Practice on a partner

Homework—take pulse readings on self and record on data sheet

Lesson II

Review of Experience Data Sheets—Concept of balance in time, stability of pulse (training/vitality)

Review Theory of Prior Material of Vata, Pitta, and Kapha with respect to the pulse

Review of the superficial pulse

- Strength
- Quality
- Position

Practice the review

Sāma Veda experience

Deep Pulse—

Theory—Concept of Balance, Concept of Permanence

The Technique—

- Occluding or Diving with all 3 fingers
- Interpreting--Strength, Attribute, Position/Count, Changing readings
- Quantitative vs. Ranking

Practice on self and on partner(s)

Lesson III

Review of Experience Data Sheets

Review of the Superficial and Deep—Theory of Prakṛti and Vikṛti

The organ Pulses—

Theory—Concept of Balance, Concept of Permanence, Positional vs. Qualitative Assessment, Symptomology

Practice

Lesson IV

Review of Experience Data Sheets

The Sub-doshas—positional versus qualitative assessment

Theory—Qualitative Changes, The Concept of Balance, Systems and Roots

Practice—the superficial of The Superficial as indicators of present-state physiology

Lesson V

Review of the Theory of Pulse Learned to Date:

Prakṛti

Vikṛti

Organs

Sub-doshas

Review of Experience Data Sheets

The Tissue Pulses

Theory—Qualitative and Positional Aspects, Concept of Balance

Practice

WHY HAVE A PULSE ASSESSMENT

by Michael Dick

One of the important diagnostic techniques of the ancient science of Āyurveda is nādi vijñān or pulse diagnosis. This is a body of knowledge handed down in the gurukula tradition in India which likely has been practiced for thousands of years. Its use as a diagnostic tool for discovering imbalances in physiology is not widely known or practiced in India because of the traditional way of orally passing knowledge from generation to generation. However, as proof of an awareness and use of it we see evidence that over the centuries it has been disseminated in various forms around Asia and has a place in traditional Chinese medicine.

The present rejuvenation of Āyurveda around the world finds this technique gaining prominence in its two applications: 1) **Self-pulse**: When done by oneself on oneself it promotes extending awareness in the mind/body system to an imbalance in physiology, which leads to healing; 2) **Pulse Diagnosis**: A trained practitioner feels the client's pulse, assesses the state of balance of physiology, and suggests remedial action for restoring balance. Āyurveda is a science which asserts the unity of mind, body, spirit, i.e., mental, emotional, physical aspects of physiology. Learning something about one facet gives understanding of all three aspects of life, and pulse yields this insight about the total person. This is one reason for having a pulse assessment.

The pulse assessment is a direct perception of the physiology of the individual. The trained pulse-taker actually feels the separate styles of functioning associated with vāta, pitta, and kapha. This information, when coupled with observations of the structure of the person, comprises a complete structure-and-function assessment of the person. One infers the structural changes from the physiology (the pulse) and one infers physiological trends when “seeing” physical changes. When they agree then one has valid understanding.

The present state of being--reflecting what is happening now in the mind/body system--is assessed at the superficial level of pulse. If there is a strong emotion, if digestion in the stomach is going on, if the body is aroused, etc all these and many other states of being can be detected.

On the other hand, deeper levels of pulse are a kind of biographical record of past stresses and natal information like physical and mental constitution. Stress stored in deep tissue suggests long term chronicity of exposure to some negative influence. Constitutional assessment is extremely important because this information gives understanding why certain foods, herbs, activities, emotions, etc. can have either a favorable or negative effect upon a given individual. It helps predict what kinds of imbalances or diseases that person is most susceptible to. It gives the practitioner clues about whether or not one expresses what nature intended/endowed from birth...has this person become other than what he/she started with? Further, it describes the innate state of balance of the doṣic principles, which serves as a target for balancing in that individual. In a way one can say that knowing something about one point in time promotes knowledge of all points in time--past, present, future. In the same way, mental constitution assessment yields a picture of the way one is likely to think and act spontaneously when in balanced physiology or good health.

Discovering etiology--at the level of cause--is another reason for having a pulse assessment. Āyurveda employs three interacting principles--vāta, pitta, kapha or motion, heat, and structure, respectively--to explain all of physiology and creation. These principles are considered to be the governors of physiology. Balance of these principles, felt in the pulse, is a requisite for health. Detecting imbalance at this level signifies finding the root cause of disease. Of course, there are many predisposing factors such as genes, congenital factors, trauma, and so on, but what brings about the manifestation is a disturbance in a doṣic principle.

In Āyurveda the heart is more than an organ--in the sense that it is a pump, for example. It is the very essence of mind and of every organ and tissue of the body and serves to both monitor and transmit or amplify the status and functioning of every organ via the pulsating arteries. An expert can feel which organs, systems, or tissues are working under stress and which doṣic principle is causing the problem. When the practitioner determines what organs and tissues are involved then a good idea of the pathogenesis (origin, path, and extent of imbalance or disease) is gained--another reason.

As a result of the foregoing reason yet another one arises based on the fact that Āyurveda recognizes six stages of pathogenesis--the first four of which are not found in the modern allopathic model. Āyurveda identifies imbalance or disease before it manifests with signs and symptoms. Remedial interventions at these stages are easier, less costly, and quicker to produce results.

There are numerous additional points which are important also. Consciousness is said to be the nature and basis of life. It expresses as a trinity of values: prāna, tejas, and ojas. Prāna is the vitality or energy of life which gives rise to tejas and ojas. Tejas is the transformational value of life necessary for digestion, metabolism, understanding, etc., which acts on ojas to convert it. Ojas is the subtle substance of life giving rise to tissue, etc. and expresses as immunity, cheerfulness, good complexion, etc. These are directly perceived in the pulse. The condition of their balance and integration with Consciousness (called saṃhitā in Sanskrit) can be directly perceived in the pulsating arteries.

The pulse contains information about impending critical times--periods of higher risk or vulnerability. These are termed ganda kala in Sanskrit. For example if a certain impulse is found under the index finger this suggests that the next 6 months are a critical time. If the impulse is found under the ring finger the next month will be a critical time. One is encouraged to be extra careful and diligent about meditation, yoga, etc. It has another preventive value in this way.

The pulse can corroborate Jyotiṣa (astrology) findings or predictions. For example, if the pulse shows weakness in the liver this indication is likely to be suggested in the natal chart for the same period. (An expert practitioner often uses the Jyotiṣa chart to aid in diagnosis and treatment.)

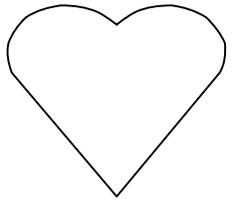
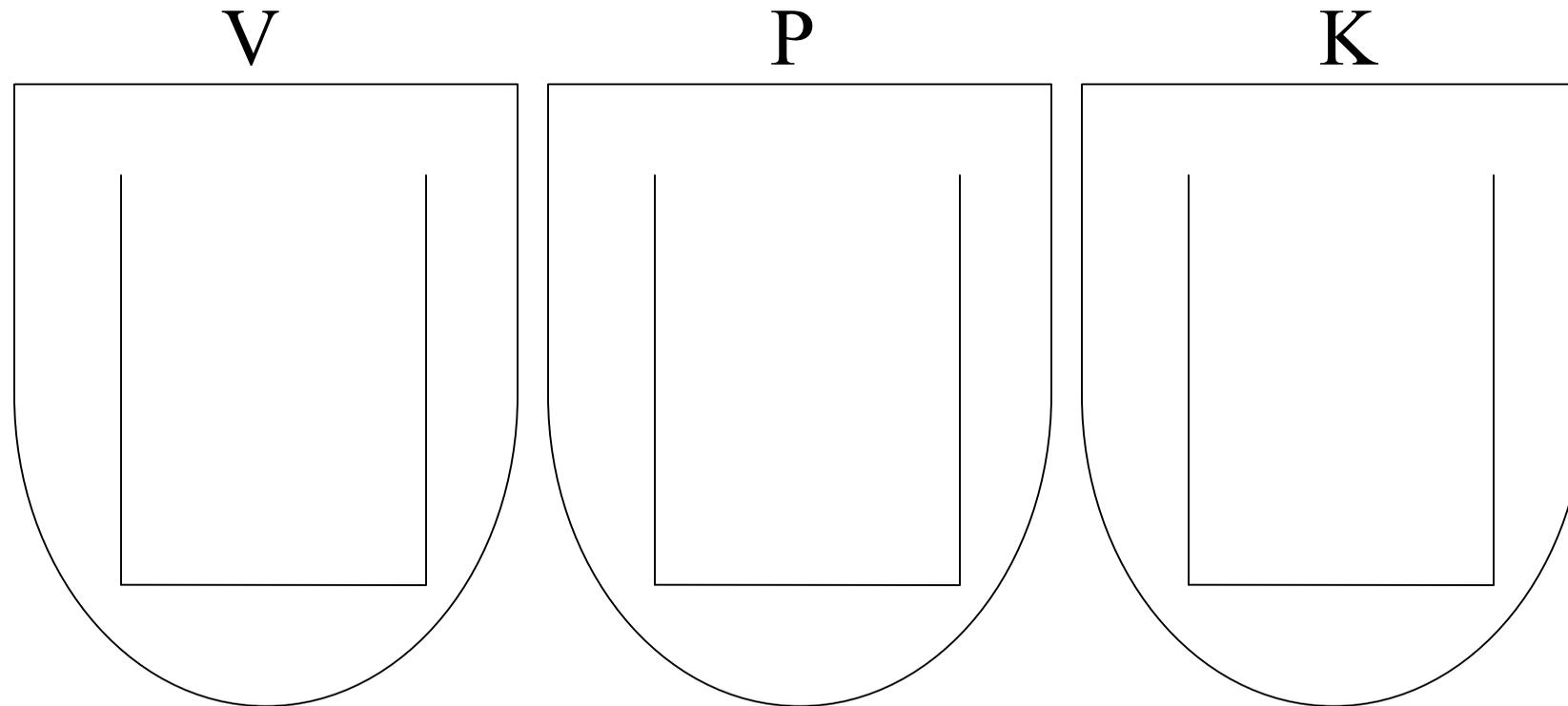
Finally, the mere touch of the practitioner is sufficient to begin the healing process as it, too, brings awareness to physiology--from the client and practitioner. Without awareness there is no healing. Health means that awareness--the healing flow of intelligence--is moving throughout physiology.

In summary pulse assessment is an unique technique which is like a window into the heart and soul of the individual. It is the best manner to assess physiology directly. It yields the fundamental understanding of cause and effect. It helps explain the past and present and even suggests something about the future. It is a tool which when combined with physical/structural assessment techniques gives a complete picture of the state and progression of imbalance. When combined with therapeutics it enables Āyurveda to be both remedial and preventative.

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PULSE vs. SPIKE

When the guṇa of the spikes under all three finger tips is the same then the "pulse" is described in terms of the doṣa matching the guṇa; e.g. a sharp spike under all three finger tips is an example of a **pitta pulse**. The quality of an individual spike under one finger tip is described as a spike named according to the quality belonging to the respective doṣa; e.g. a **pitta spike** is sharp.



SUPERFICIAL PULSE₁

- Vega is speed or BPM of heart; vāta rate ≥ 70 bpm; pitta ~ 60 ; kapha ≤ 50 and these may be taken as a provisional targets for **condition of balance**
- Bala is force of heart beat felt in the artery; occluded artery pressure yields diastolic and non-occluded artery pressure reveals systolic reading; 120mm of Hg/ 68mm Hg is a typical **condition of balance**
- Tāla is rhythm; regularity is **condition of balance**; otherwise is imbalance
- Sirā Kathinya is hardness of the artery wall/muscle; soft correlates with kapha prakṛti, flexible with pitta, and hard with vāta prakṛti. Softness is more favorable than hardness and may be taken as a **condition of balance**
- Volume refers to the diameter of the artery under the palpating fingers; thin feel of artery is thready while wider feel of the artery is full; full volume is a desirable **condition of balance**

SUPERFICIAL PULSE₂

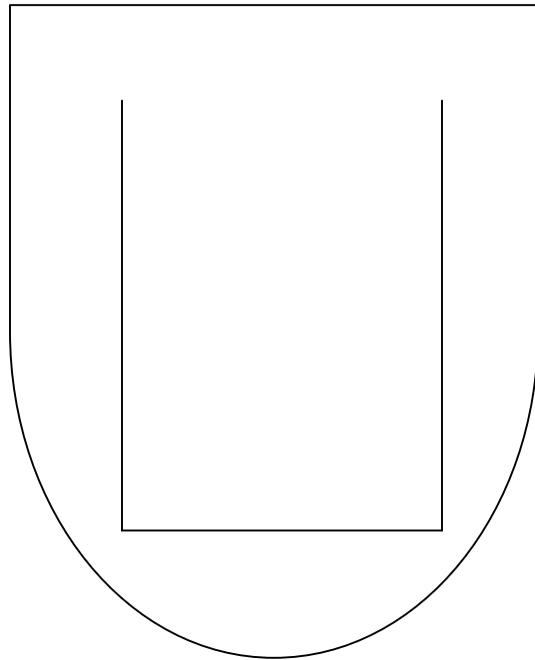
- Called Vikṛti level but its meaning (imbalance) is confusing; better to refer to this level as "superficial (level) pulse"
- Relates to or indicates the quantitative increase of doṣa: \geq sancaya stage of samprāpti
- Implies that doṣa has changed qualitatively, which has promoted sancaya
- Interpretation of doṣic involvement is based upon: guṇa, location of spike, motion of spike, and the direction of a spike
- **Condition of Balance:** the form of the spike under the vāta finger is a snake-like motion and quality moving distally; under the pitta finger a sharp, lifting spike is felt--referred to as a frog; under the kapha finger a dull, heavy spike is felt--referred to as a swan. Each animal must be felt under the respective finger (VPK) and be in its own house (VPK). Any deviation from this is imbalance.

SUPERFICIAL PULSE₁

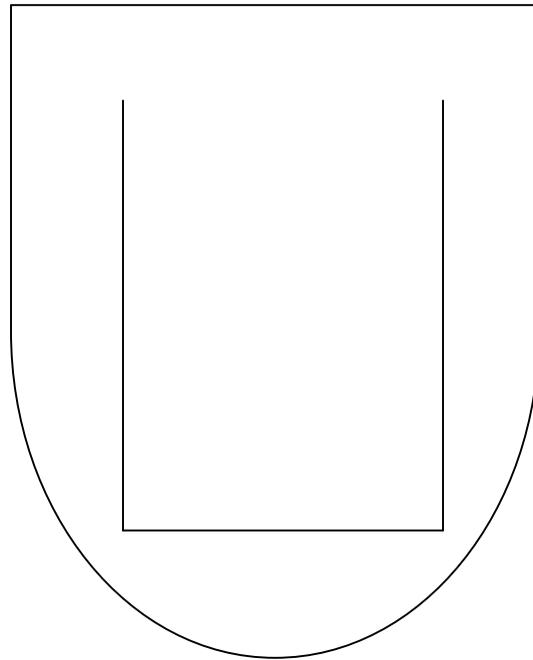
The Technique:

Simultaneously press all 3 fingers to depth needed to observe speed (BPM), strength, rhythm, softness/flexibility, hardness, and volume of pulsing radial artery

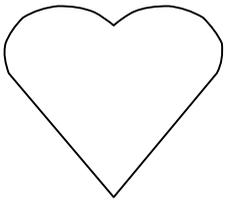
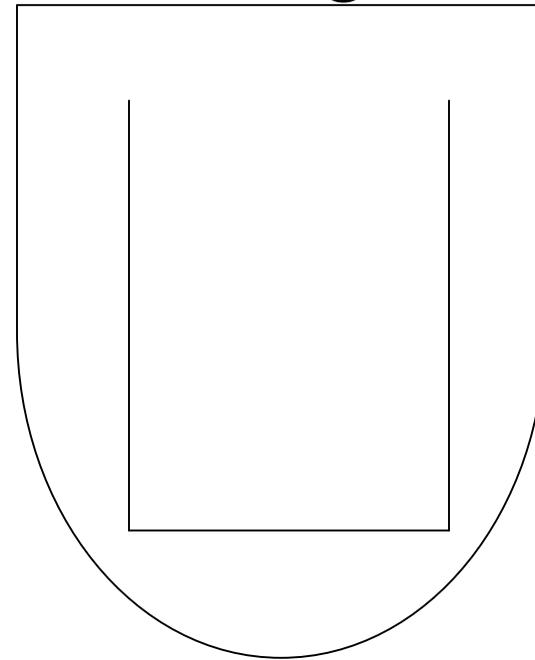
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Middle



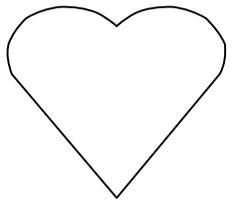
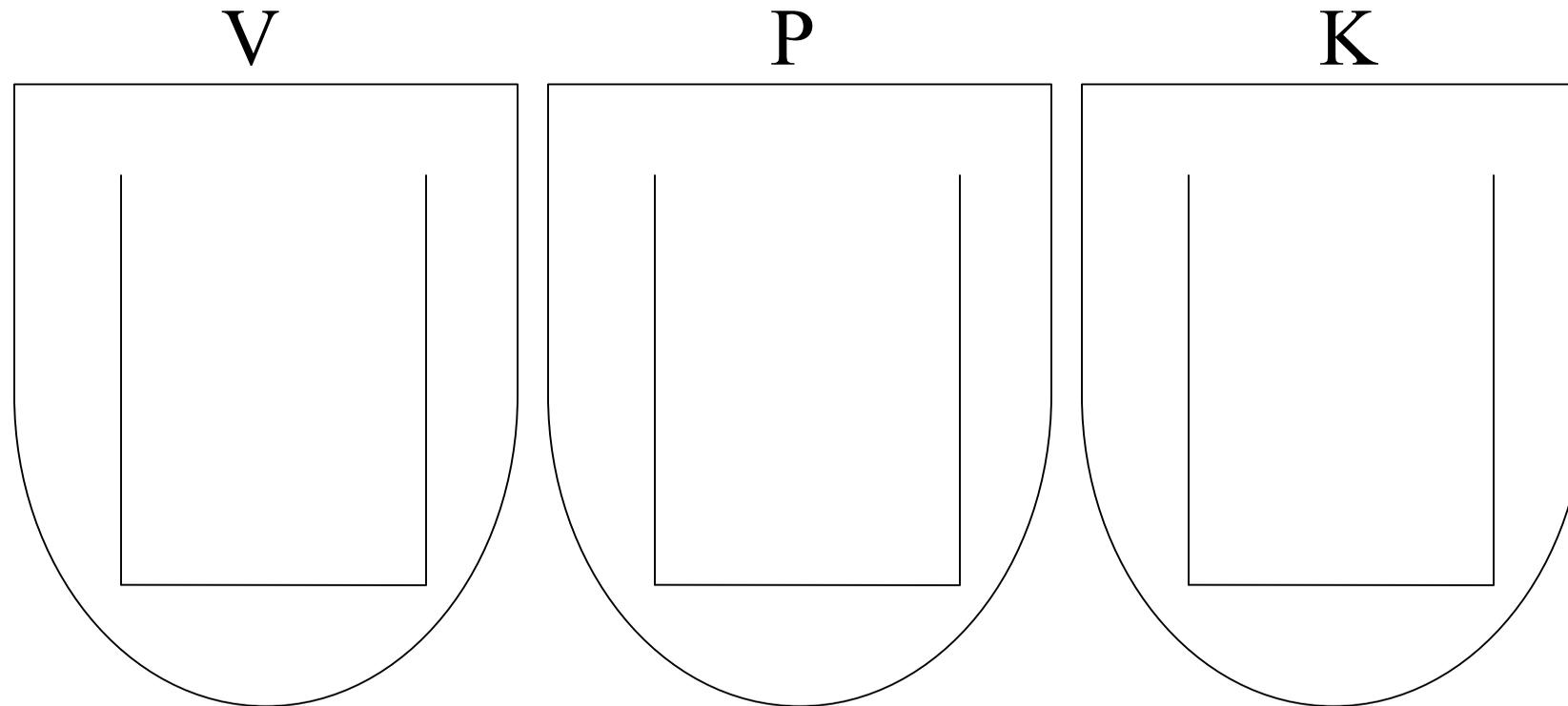
Ring



SUPERFICIAL PULSE₂

The Technique:

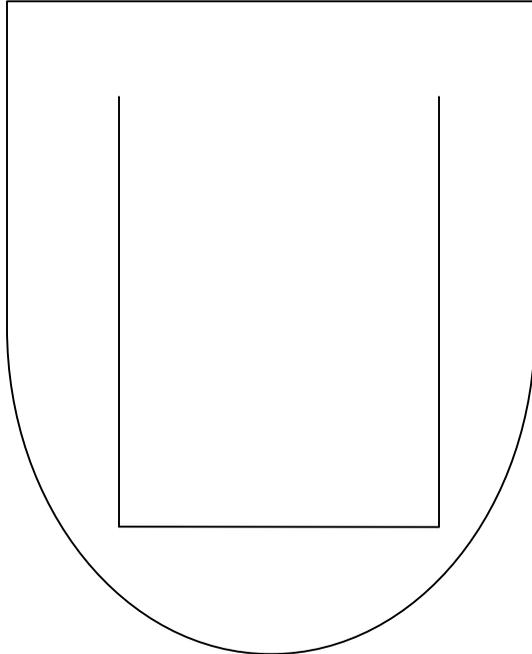
Simultaneously Press all 3 Fingers to 1st Level (light level of spikes) and observe guṇa and form of spikes in the vāta/pitta/kapha zones



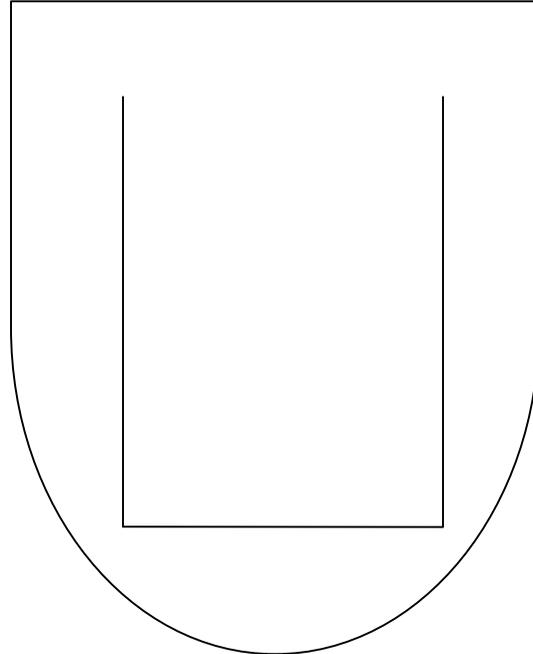
SUPERFICIAL PULSE_{2a}

Interpreting guṇa, motion, location, direction of motion

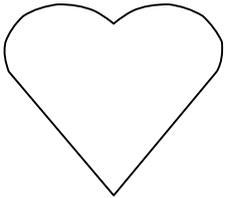
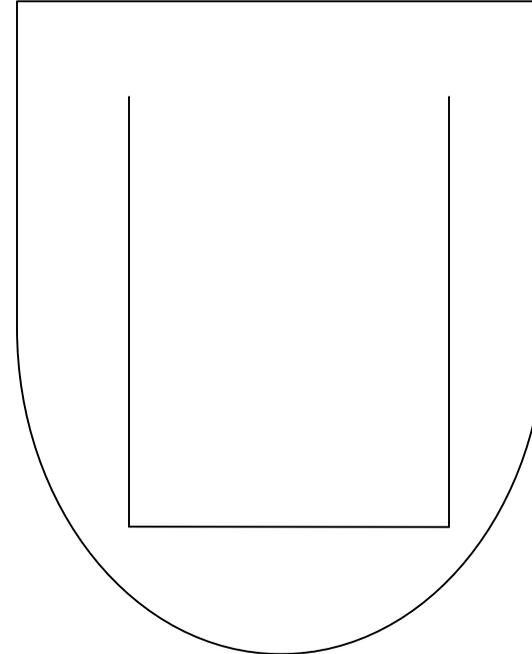
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P



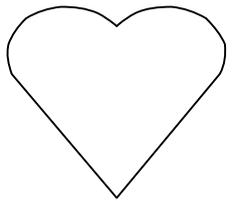
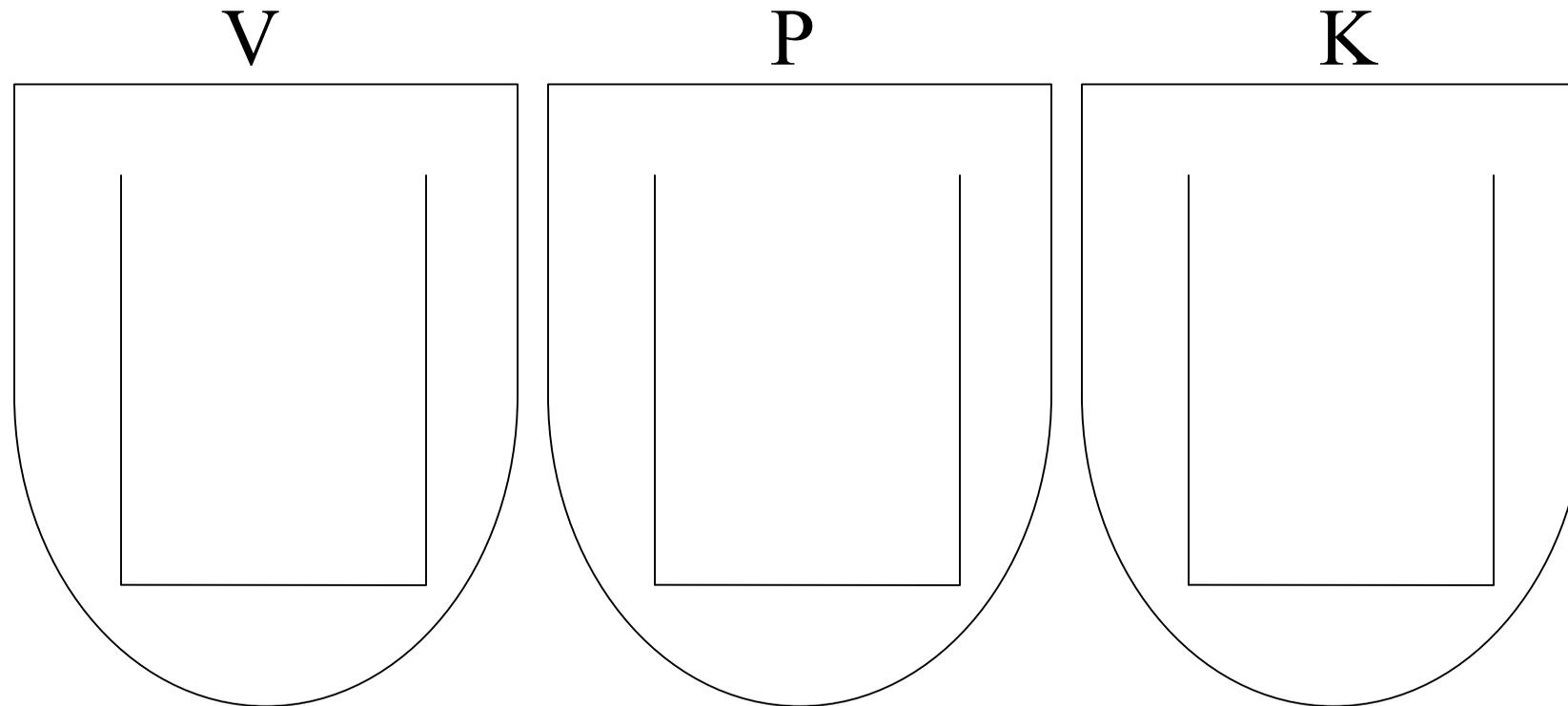
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PRAKṚTI PULSE

The Technique:

Simultaneously Press all 3 Fingers to 7th Level (deepest level of spikes) and total-up spikes in each of the vāta/pitta/kapha zones



Doshic Subtype Abbreviations

Pv = prāṇa vāta
Uv = udāna vāta
Sv = samāna vāta
Ap = apāna vāta
Vv = vyāna vāta

Pp = pācaka pitta
Rp = ranjaka pitta
Sp = sādḥaka pitta
Ap = alocaka pitta
Bp = bhrajaka pitta

Kk = kledaka kapha
Ak = avalambaka kapha
Bk = bodhaka kapha
Tk = tarpaka kapha
Sk = śleṣaka kapha

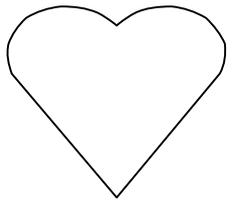
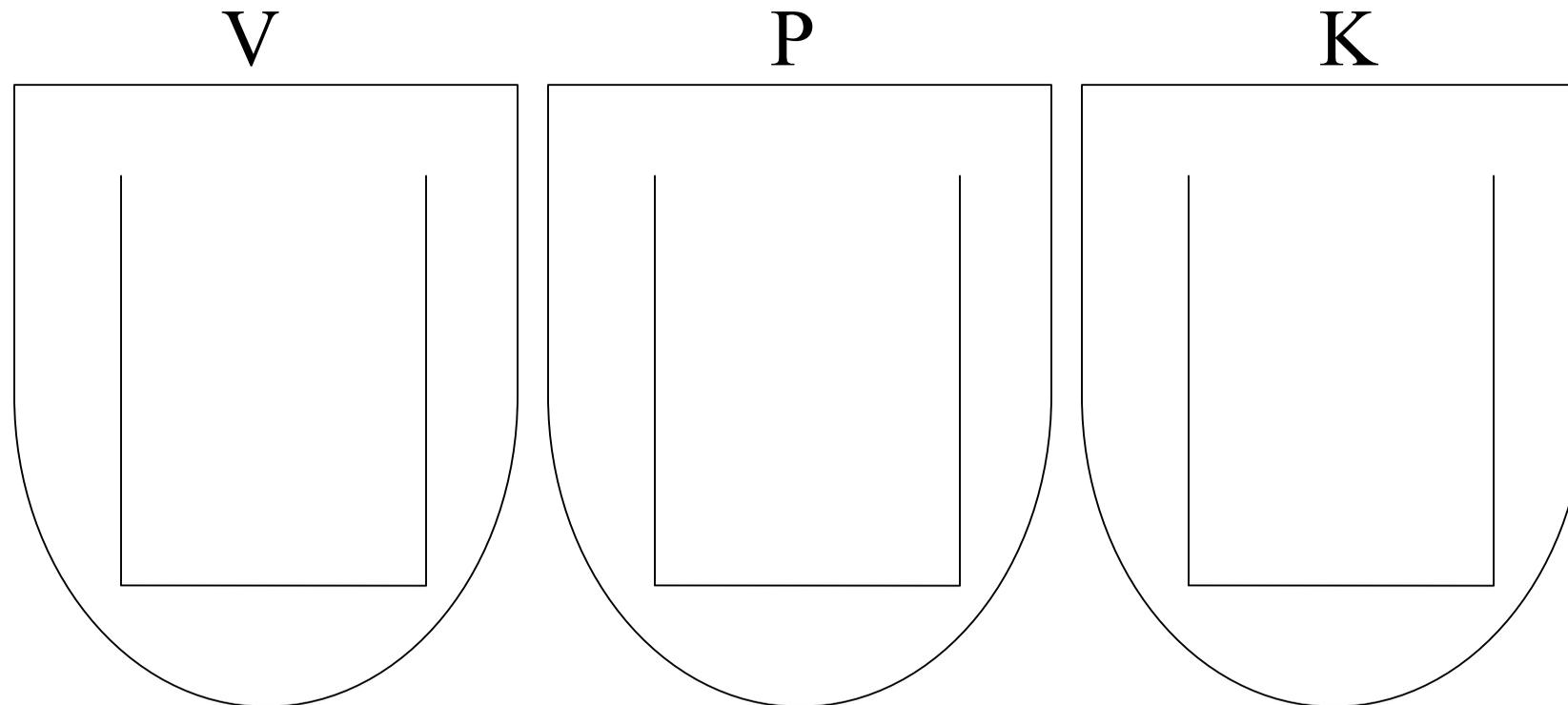
SUB-DOṢA PULSE

- 3rd level
- Represents the qualitative functioning of the doṣas
- Does not imply doṣa vṛddhi but may promote quantitative increase
- Force or strength of spike denotes degree of imbalance
- 5-sub-types denoted on the respective doṣa finger tip
- Movement of doṣic matter determined by vata sub-type disturbed
- Balanced Condition: 3 separate non-local spikes (one under each finger tip)

SUB-DOṢA PULSE

The Technique:

Simultaneously Press all 3 Fingers to 3rd Level (first significant change below superficial level)--commonly found: Rp



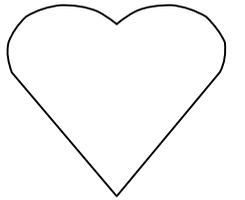
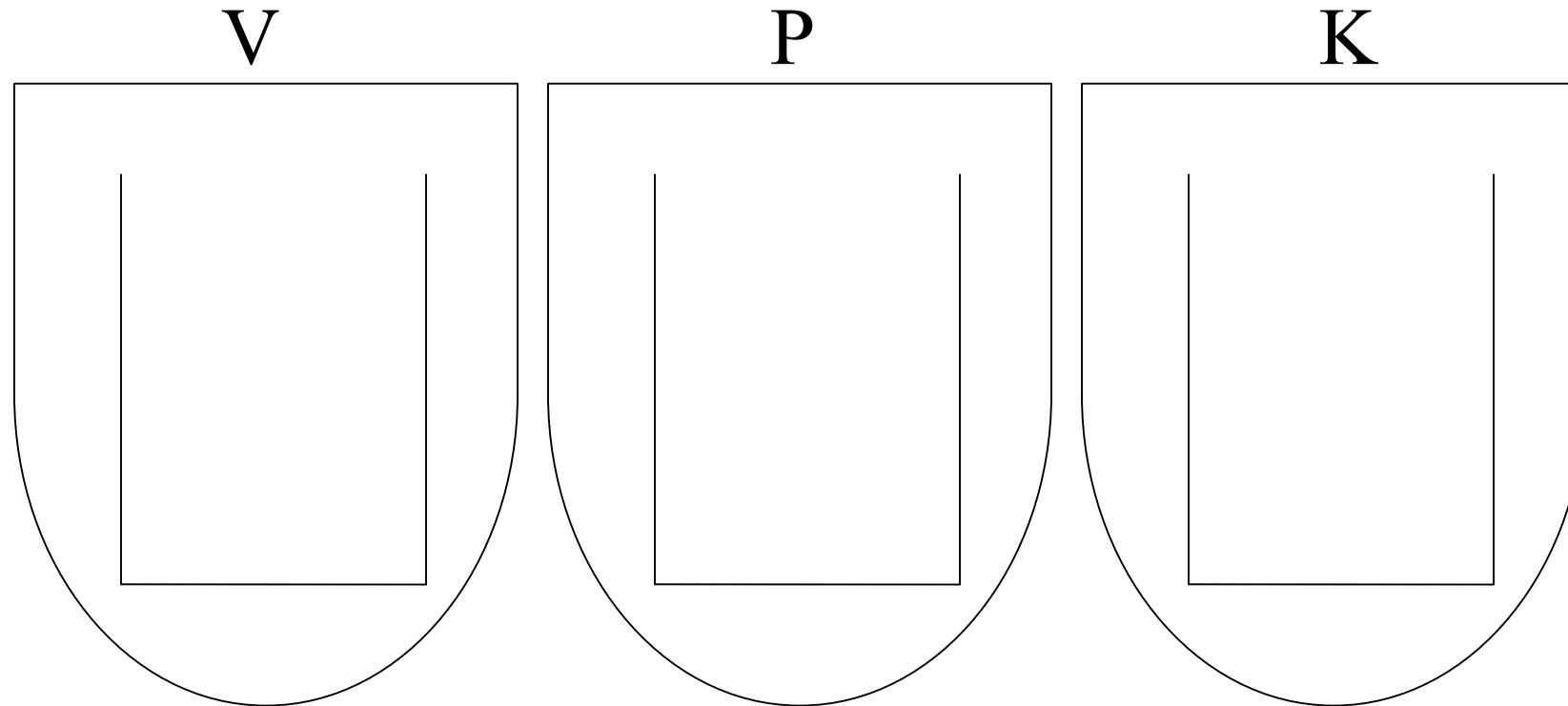
DHĀTU PULSE

- 5th level
- Represents deeper structure and function
- Suggests chronicity of imbalance (increase in quantity of doṣa)
- Tissue affected determined by location under finger tip
- Doṣa involved determined by quality of spike except reproductive tissue which is determined by being on the VPK finger in the medial aspect
- Balanced Condition:
 - 3 separate non-local spikes (one under each finger tip)

DHĀTU PULSE

The Technique:

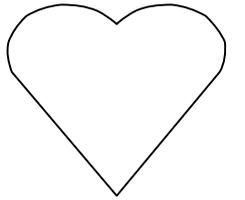
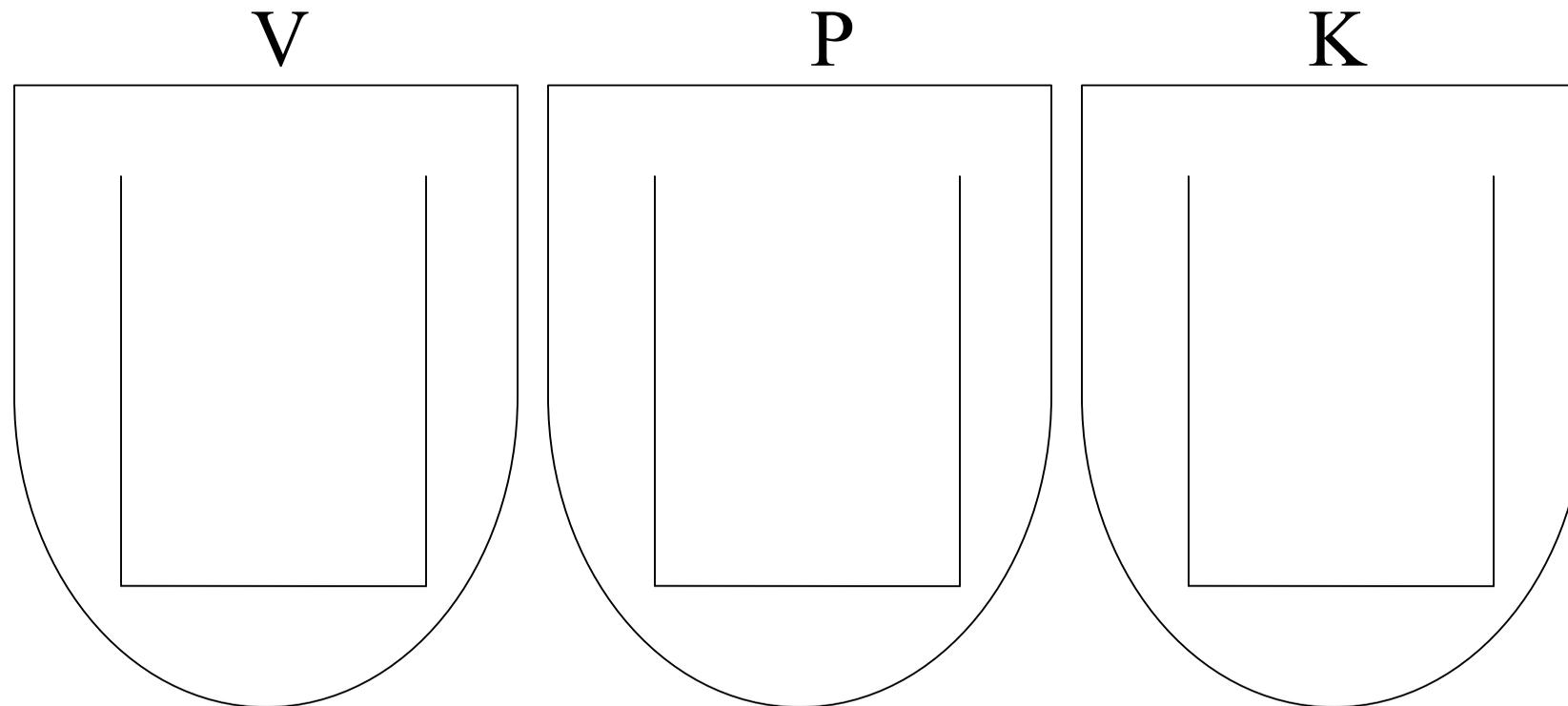
Simultaneously Press all 3 Fingers to 5th Level (past the clouds)



ORGAN PULSE

The Technique:

Simultaneously Press 2 Fingers (both of your index fingers then middle and then ring fingers to 1st Level (light level of spikes) and observe spikes in the vāta/pitta/kapha zones; repeat for deep pressure level; note strength and location of spikes



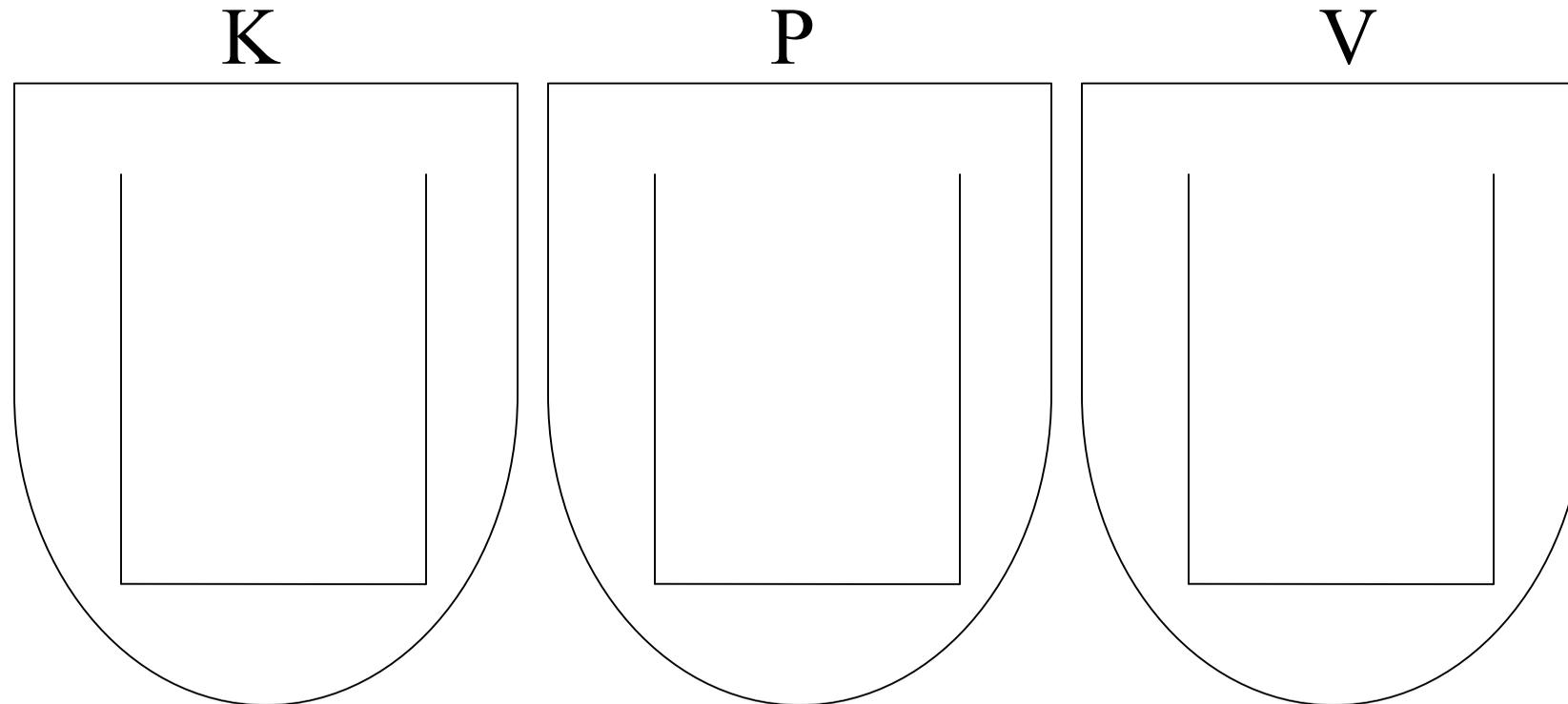
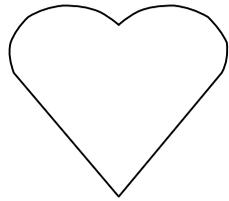
ORGAN PULSE

- Superficial and deep levels for the 12 "organs"
- Timely information = present functional status of the organ
- Strong spike indicates good vitality of organ and weak indicates organ is taxed or working under duress; both indicate imbalance of functioning according to the doṣa disturbing the organ
- Localized spike indicates imbalance attributed to the doṣa that matches the quality of the spike
- Balanced Condition: strong, non-local spike under finger tip for each organ

ORGAN PULSE

The Technique:

Simultaneously Press 2 Fingers (both of your index fingers then middle and then ring fingers to 1st Level (light level of spikes) and observe spikes in the vāta/pitta/kapha zones; repeat for deep pressure level; note strength and location of spikes



Building Intuition Exercises

Client # 1 First Name: _____ Permission to Discuss as Subject Y N
guṇas _____ vega _____ tāla _____ balā _____ sira kathinya _____
Prakṛti: V P K Vikṛti: V P K S/D R R M M A M S
P T O ORGANS: C GB P L L C SI S B H S K
TONGUE: _____ FACE: _____ AGNI: _____ AMA: _____

Profile Building: Give an explanation / description of the observations you have made in terms of your expectations of the etiology and signs and symptoms.

Client # 2 First Name: _____ Permission to Discuss as Subject Y N
guṇas _____ vega _____ tāla _____ balā _____ sira kathinya _____
Prakṛti: V P K Vikṛti: V P K S/D R R M M A M S
P T O ORGANS: C GB P L L C SI S B H S K
TONGUE: _____ FACE: _____ AGNI: _____ AMA: _____

Profile Building: Give an explanation / description of the observations you have made in terms of your expectations of the etiology and signs and symptoms.

Client # 3 First Name: _____ Permission to Discuss as Subject Y N
guṇas _____ vega _____ tāla _____ balā _____ sira kathinya _____
Prakṛti: V P K Vikṛti: V P K S/D R R M M A M S
P T O ORGANS: C GB P L L C SI S B H S K
TONGUE: _____ FACE: _____ AGNI: _____ AMA: _____

Profile Building: Give an explanation / description of the observations you have made in terms of your expectations of the etiology and signs and symptoms.

Building Intuition Exercises

Client # 4 First Name:

Permission to Discuss as Subject Y N

guṇas

vega

tāla

balā

sira kathinya

Prakṛti: V P K

Vikṛti: V P K

S/D

R R M M A M S

P T O

ORGANS: C GB P

L L C

SI S B

H S K

TONGUE:

FACE:

AGNI:

AMA:

Profile Building: Give an explanation / description of the observations you have made in terms of your expectations of the etiology and signs and symptoms.

Client # 5 First Name:

Permission to Discuss as Subject Y N

guṇas

vega

tāla

balā

sira kathinya

Prakṛti: V P K

Vikṛti: V P K

S/D

R R M M A M S

P T O

ORGANS: C GB P

L L C

SI S B

H S K

TONGUE:

FACE:

AGNI:

AMA:

Profile Building: Give an explanation / description of the observations you have made in terms of your expectations of the etiology and signs and symptoms.

Client # 6 First Name:

Permission to Discuss as Subject Y N

guṇas

vega

tāla

balā

sira kathinya

Prakṛti: V P K

Vikṛti: V P K

S/D

R R M M A M S

P T O

ORGANS: C GB P

L L C

SI S B

H S K

TONGUE:

FACE:

AGNI:

AMA:

Profile Building: Give an explanation / description of the observations you have made in terms of your expectations of the etiology and signs and symptoms.

Pulse Exercises

Exercise 1

Prakṛti V2P3K1

Vikṛti V3P3K1

Subdoṣas: Pv Uv / Rp / Ak

Organs: Lungs, Colon, Kidneys/Adrenals

Tissues: Mj

What signs and symptoms do you anticipate?

What herbs would you recommend?

What diet would you recommend?

What Lifestyle (changes) would you recommend?

Exercise 2

Prakṛti V3P2K1

Vikṛti V3P3K1

Subdoṣas: Uv Sv / Rp Sp /

Organs: Liver, Stomach, SI

Tissues: Rk

What signs and symptoms do you anticipate?

What herbs would you recommend?

What diet would you recommend?

What Lifestyle (changes) would you recommend?

Pulse Exercises

Exercise 3

Prakṛti V2P3K1

Vikṛti V2P3K2

Subdoṣas: Pv Uv / Rp / Ak

Organs: Lungs, Kidneys/Adrenals

Tissues: Me

What signs and symptoms do you anticipate?

What herbs would you recommend?

What diet would you recommend?

What Lifestyle (changes) would you recommend?

Exercise 4

Prakṛti V3P2K1

Vikṛti V3.5P2.5K1.5

Subdoṣas: Pv Uv Sv / Rp Sp / Ak , Bk

Organs: Lungs, Liver, Stomach, Kidneys/adrenals/

Tissues: Rs, Rk, Mm, Me

What signs and symptoms do you anticipate?

What herbs would you recommend?

What diet would you recommend?

What Lifestyle (changes) would you recommend?

Pv = prāṇa vāta

Uv = udāna vāta

Sv = samāna vāta

Ap = apāna vāta

Vv = vyāna vāta

Pp = pācaka pitta

Rp = ranjaka pitta

Sp = sādḥaka pitta

Ap = alocaka pitta

Bp = bhrajaka pitta

Kk = kledaka kapha

Ak = avalambaka kapha

Bk = bodhaka kapha

Tk = tarpaka kapha

Sk = śleṣaka kaph