#### Kapha Dosha's basic Properties and specialities:

गुरुशीतमृदुस्निग्धमधुरस्थिरपिच्छिलः।

श्लेष्मणः प्रशमं यान्ति विपरीतगुणैर्गुणः ॥

(च.सू. १/६१)

श्लेष्मा श्वेतो गुरुः स्निग्धः पिच्छिलः शीत एव च।

मधुरस्त्वविदग्धः स्याद्विदग्धो लवणः स्मृतः ॥

(सु.सू. २१/१५)

माधुर्यस्नेहगौरवशैत्यपैच्छिल्यगुणलक्षणः श्लेष्मा।

(सु.सू. ४२/७)

स्निग्धः शीतो गुरुर्मन्दः श्लक्ष्णोमृत्स्नः स्थिरः कफः।

(अ.ह्र.सू. १/१२)

मृत्स्नः मृद्यमानः अन्गुलियाहि पिच्छिलगुणयुक्तः चकचकायमानः।

(अरुणदत्त)

कफः स्निग्धो गुरुः श्वेतः पिच्छिलः शीतलस्तथा।

तमोगुणाधिकः स्वादुर्विदग्धो लवणः स्मृतः ॥

(शा. पू. ५/३४)

Panchbhuatika Composition Kapha Dosha:

#### अम्भ: पृथिवीभ्यां श्लेष्मा: ।। (अ. सं. सू. 20/1)

• Kapha being considered as a concrete and stable substance of the body, its stability is due to its Apya and Parthiva nature.

#### (1) Properties of Aapya Dravya: -

#### द्रवस्निग्धशीतमन्दमृदुपिच्छिलरसगुणबहुलान्याप्यानि, तान्युपक्लेदस्नेहबन्धविष्यन्द -मार्दवप्रह्लादकराणि;। (च. सु. 26/11)

- Drava (liquid)
- Snigdha (unctuous)
- Shita (cold)
- Manda (dull)
- Mridu (soft)
- Pichhila (slimy)
- Rasa (abounding in the qualities of taste) are dominated by jala;
- they promote stickiness, unctuousness, compactness, moistness, softness and happiness.

#### (2) Properties of Paarthiva Dravya:

तत्र द्रव्याणि गुरुखरकठिनमन्दस्थिरविशदसान्द्रस्थूलगन्धगुणबहुलानि तान्युपचयसङ्घातगौरवस्थैर्यकराणि;। (च. सु. 26/11)

ार्थवानि,

- Guru (heavy)
- Khara (coarse/rough)
- Kathina (hard)
- Manda (dull)
- Sthira (stable)
- Vishada (no slimy)
- Sandra (solid)
- Sthula (macroscopic/gross)
- Gandha (bounding in the quality of smell) are dominated by Prithvi;
- they promote plumpness, compactness, heaviness and stability.

# Functions of these Guna in our body:

#### Aapya Dravya: Upkledana (moistening), Snehana (unction), Bandhana (binding), Vishyandana (oozing), Mardava (softening), Prahaladan (exhilaration)

## Parthiva Dravya:

Upchaya (growth and development), Sanghata (compactness), Gaurava (Heaviness), Sthairya (firmness)

# स्नेहोबन्धः स्थिरत्वं च गौरवं वृषताबलम्। क्षमाधृतिरलोभश्च कफकर्माविकारजम्।।

(च.स. १८/५१) Anatomical functions (bandhana, snehana, sthirata) Physiolgical Psychological functions **Functions** (kshama, alobha, (bala, vrishata) budhhi)

# संधिश्लेषणस्नेहनरोपणपूरणबृहणतर्पणबलस्थैर्यकृतश्लेष्मा पञ्चप्रविभक्तः उदककर्मणा अनुग्रहं करोति ॥

(सु. सु. 15/4)

- 1) संधिश्लेषण (Lubrication of joints of body):
- Sandhi = Joint (bony joints)
- Bony joints are stabilised by the Kapha.
- But Ayurveda has also provided an explanation for the junction between two muscles, two Sira, etc.
- It is obvious that Kapha is accountable for the union of any two molecules.
- The luscious, sturdy and slimy properties serve this purpose.

#### (2) स्नेहन (Unctuosity or Greasiness):

• All tissues contain fat because of the Kapha Dosha.

#### (3) रोपण (Healing functions):

- Rasa and Rakta tissues are harmed when any sickness assaults the body.
- Because of Kapha's ability to heal, the regeneration process moves quickly.
- The healing powers of the Kapha Dosha, such as the shiny, sticky ete, can protect the body.

#### (4) पूरण (Replacement or filling function):

• Healing is meant for tissues that have suffered only minor harm, whereas filling is necessary for tissues that have suffered complete destruction.

- (5) बृहण
- (6) तर्पण
- (7) बलकृत (Gives strength):
- The body's strength determines its ability to perform at its highest potential.
- By virtue of its feeding properties, Kapha offers all Dhatu (body tissues) strength & stability.
- When every tissue is operating at its best, strength improves.
- (8) स्थैर्यकृत (Stability):
- This results from the strong and stable qualities of Kapha.
- Due to Kapha's stabilising effects on the body's tissues and overall physical health (little deterioration).

#### (9) उदककर्म (Saumya Bhava):

- Anchoring, boosting, supporting and anabolic functions into the living body.
- It also forms joints and junctions, binds them together, heals wounds, fulfils dhatus, builds strength, creates stability and increases the formation of Mansa and other Dhatus.
- The maintenance of electrolyte and water balance Because of its fluid component.
- The Kapha is in charge of forming various body fluids in the intracellular, interstitial and intravascular compartments.

#### (10) वृषता (sexual potency):

• The ability to procreate.

#### (11) क्षमाधृतिरलोभ (To forgive):

- The mind is influenced by traits like softness, unctuousness, coolness and stability.
- Kapha lessens mental and intellectual irritability and overstimulation.
- A peaceful mind is capable of clear thinking and can grow flexible and tolerant.
- The ability to forgive is developed in the individual.
- The Kapha Dosha regulates psychic traits like tolerance, patience, lack of greed, zeal, wisdom, and memory.

#### (12) विसर्ग कर्म:

विसर्गादानविक्षेपै: सोमसूर्यानिला यथा।

धारयन्ति जगदेहं कफपित्तानिलस्तथा।।

(सु. सु 21/8)

#### विसर्ग: सर्जन बलस्य। (डल्हण)

- Visarga corresponds to "the preservation of Bala." (strength).
- Thus, Kapha as a whole is responsible for all the anabolic processes including growth and development of the body.

सोम एव शरीरे श्लेष्मान्तर्गत: कुपिताकुपित: शुभाशुभानि तद्यथा दार्ढयं शैथिल्यमुपचयंकार्श्य - मुत्साहमालस्य वृषताक्लीबतां ज्ञानमज्ञानं बुद्धिंमोहमित्येवमादीनि चापराणि द्वंद्वानीति ॥

(च. स्. 12/12)

## Types of Kapha:

Acharya Charaka and Sushruta had not described different subtypes by their particular **names** but **Acharya Vaghbhatta** described them with their particular names with their specific functions.

#### अवलंबकक्लेदकबोधकतर्पकश्लेषकत्वभेदै: श्लेष्मा।

## (अ. सं. सू. 20/6)

- 1) Avalambaka
- 2) Kledaka
- 3) Bodhaka
- 4) Tarpaka
- 5) Shleshaka



-Tarpaka Kapha (Brain - Cerbrospinal fluid)

Bodhaka Kapha (Oral Cavity)

Shleshaka Kapha (Joint – ligments, cartilage)

-Avalambaka Kapha (Heart & Lungs)

\_Kledaka Kapha (Intestinal Mucosal lining)

Sr. No	Name of Kapha	Function
1	अवलंबक	Protection of internal vital organs like heart
2	क्लेदक	Softening food
3	बोधक	Refreshing a person by realizing taste of food
4	तर्पक	Nourishment of special sense organs
5	श्लेषक	Stability of joints

- Characteristics: Sukshma guna dominant
- Mahabhuta: Akash
- Location: Joints
- Function: Sandhi sanshleshan (Lubrication of Joints)
- Modern:
- Provides lubrication and oleation to bony joints
- Free assess for range of movement

#### Function:

## संधिसंश्लेषणकृत् संधिबन्धन करोति । (डल्हण)

- 1) synthesis of joints or junction
- 2) binds the junctions and joints

पर्वस्थोअस्थि संधिश्लेषणात् श्लेषक इति । (अ. सं. सु.20/8)

1) synthesis of joints or junctions

पर्वस्थोअस्थिसंधिस्थ: द्वयोरस्थनो: संधिश्लेष्णाश्चश्लेषकसंज्ञ: ।।

Which substance situated between boney joints and between junctions and helps in synthesis junctions or binds structures together is called Shleshaka Kapha.

ष्णाश्चश्लेषकसंज्ञ:। (शशिलेखा व्याख्या, इंदुकृत्)

Which synthesized junctions is called Shleshka Kapha.

संधिसंश्लेषाच्श्लेषक: संधिषु स्थित: ।। (अ. ह्र. स्. 12/17)

Which synthesized junctions and situated into joints called Shleshaka Kapha.

संधिसंस्थ: श्लेष्मा सर्वसंधिसं श्लेषात् सर्वसन्ध्यनुग्रहं करोति । (सु. सु. 21/14)

Which Kapha situated in junctions and it does synthesis and maintenance of all joints and junctions called Shleshaka Kapha.

स्नेहमङ्गेषु संधीनां स्थैर्यं बलमुदीर्णताम्। (सु. शा. 7 /12)

Kapha moisturises and lubricates structures and stabilises joints.cxix

श्लेष्मण: सर्वसंधिनां संश्लेषं विदधात्यसौ ।। (भा. प्र. पू. 3/132)

Due to facilitating lubrication between bones in joints, it is called Shleshaka Kapha.

चतुर्थी श्लेष्मधरा सर्वसंधिषु प्राण भृतां भवति ।। (सु. शा. 4/14-15)

Shleshmadhara Kala is fourth in all kalas; here kala can be preferring as membrane which is situated between different tissues, and Shleshmadhara Kala maintain and nourishes all junctions and joints.cxxi

स्नेहाभ्यक्ते यथा ह्यक्षे चक्रं साधु प्रवर्तते भवति ।। (सु. शा. 4/14-15)

Shleshamadhara Kala is necessary for sustaining movements of joints by lubricating junctional structures of different parts of body.

सन्धय: साधु वर्तन्ते संश्लिष्टा: श्लेष्मणा तथा भवति ।। (सु. शा. 4/14-15)

All junctions and joints functions properly and stay maintained when Shaleshaka Kapha functions properly.

#### Guna of Shleshaka Kapha: -

- - Shleshaka Kapha has Guna are Guru, Manda, Hima, Snigdha, Shlakshana, Sandra, Mdridu, Sthira.
- For proper functioning of Shleshaka Kapha sequence of Guna should be for Shleshaka Kapha is –
- Shleshaka Kapha'Guna 1. Sthira 2. Hima 3. Snigdha 4. Pichhila 5. Slakshana (Mritsan) 6. Mridu 7. Sandra 8. Guru 9. Manda

- According to Panchbhautika Sangathan:
- Aapya Guna
- 1. Drava Guru 2. Snigdha 3. Sheeta 4. Pichhila 5. Mridu Manda
- Parthiva Guna Sthira Sthula Sandra Kathina 6. Manda 7. Vishad 8. Khara

• Shleshaka Kapha Kshaya: - The looseness of joints, improper functioning of joints, dryness of body, Smoky and burning sensation from mouth. It may further explain dryness caused by Vata Vriddhi and dryness is found all over bodily function which may result in dryness of skin, mouth, mucous membrane, constipation, Mutrakriccha etc. Dryness and loosening of joints are due to lack of functioning of ligaments and degradation of synovial membrane and cartilages

# Shleshaka Kapha functions as per Samhita:

- 1. Sandhi Sanshaleshana Synthesis of Sandhi.
- 2. Anugrah of Sandhi Maintenance and assistance of different Sandhi)
- 3. Sthirta in Sandhi Compactness and stability of Sandhi
- 4. Anugraha (1) A. favour, kindness, obligation; showing favour, obliging, rewarding (opp. nigraha);

•	Shleshaka Kapha Vriddhi: - Sandhi - Vishlesha (Sluggishness of bone and joints) is due to swelling of synovial membrane and excessive fluid collection in joints which cause lack of proper functioning of joints and stiffness of body.

• Acute and chronic inflammation: - The initial, rapid response to infections and tissue damage is called acute inflammation. Acute inflammation has three major components: - (1) Dilation of small vessels leading to an increase in blood flow. (2) Increased permeability of the microvasculature enabling plasma proteins and leukocytes to leave the circulation. (3) Emigration of the leukocytes from the microcirculation, their accumulation in the focus of injury, and their activation to eliminate the offending agent. When acute inflammation achieves its desired goal of eliminating the offenders, the reaction subsides, but if the response fails to clear the stimulus, the reaction can progress to a protracted phase that is called chronic inflammation. Chronic inflammation is of longer duration and is associated with more tissue destruction, the presence of lymphocytes and macrophages, the proliferation of blood vessels, and the deposition of connective tissue.

• Antardaha: - Aacute inflammation. Extracellular hyaline has been more difficult to analyze. Collagenous fibrous tissue in old scars may appear hyalinized, but the biochemical basis of this change is not clear. In long-standing hypertension and diabetes mellitus, the walls of arterioles, especially in the kidney, become hyalinized, resulting from extravasated plasma protein and deposition of basement membrane material.

• Edema: - Edema is the result of the movement of fluid from the vasculature into the interstitial spaces; the fluid may be protein-poor (transudate) or protein-rich (exudate). Edema fluids and effusions may be inflammatory or noninflammatory. These protein-rich exudates accumulate due to increases in vascular permeability caused by inflammatory mediators. Usually, inflammation-associated edema is localized to one or a few tissues, but in systemic inflammatory states, such as sepsis, that produce widespread endothelial injury and dysfunction, generalized edema may appear, often with severe consequences.cxxix Activated platelets also produce the prostaglandin thromboxane A2 (TxA2), a potent inducer of platelet aggregation. Aspirin inhibits platelet aggregation and produces a mild bleeding defect by inhibiting cyclooxygenase, a platelet enzyme that is required for TXA2 synthesis.

- Increased permeability of the microvasculature Can be considered as Sandhi Vishlesha
- Shleshaka Vridhi = Sandhi Vishlesha. Inflammation in the tendons, ligaments, and occasionally the adjacent skeletal muscle frequently accompanies the arthritis and produces the characteristic radial deviation of the wrist, ulnar deviation of the fingers and flexion hyperextension of the fingers (swan-neck deformity, boutonnière deformity). The end result is a joint that has no stability and minimal or no range of motion. The spondyloarthropathies are also a heterogeneous group of disorders that are unified by the following features: