

vii. Definition, types and numbers of srotas, dhamanī, śīrā and nāḍī

Table Of Contents

Add a header to begin generating the table of contents

Srotas (Channels or Pathways)

Definition and Etymology

- **Srotas** comes from the root “√sru,” meaning “to flow.”
- They are **body channels or pathways** through which **dhātus (tissues), doṣas, malas (waste products), and nutrients** circulate or move.
- Srotas exist at both **macro** levels (e.g., the alimentary canal, blood vessels) and **micro** levels (subtle channels at a cellular or energetic scale).

Key Characteristics

1. **Flow of Substances:** Each srotas is specialized for transporting specific substances (e.g., nutrients, waste, vital energy).
2. **Regulated by Doṣas:** Proper flow depends on balanced Vāta (movement), Pitta (transformation), and Kapha (stability/lubrication).
3. **Sroto-dushti (Channel Dysfunction):** Channels can become blocked (sanga), dilated (atimārga), constricted (saṅkoca), or lost (vimārga gamana), leading to disease.

Types and Number of Srotas

- **Caraka Saṃhitā** often enumerates **13 or 14 principal srotas** based on the substances they carry:
 1. Prāṇavaha (respiratory/energy)
 2. Udakavaha (water/fluid)
 3. Annavaha (food/digestion)
 4. Rasavaha (rasa/plasma)
 5. Raktavaha (rakta/blood)
 6. Māṃsavaha (muscle tissue)
 7. Medovaha (fat/adipose)
 8. Asthivaha (bone)
 9. Majjāvaha (marrow and nerve tissue)
 10. Śukravaha (reproductive tissue)
 11. Purīṣavaha (feces)
 12. Mūtravaha (urine)
 13. Svedavaha (sweat)
 14. (Stanyavaha for breast milk and Ārtavavaha for menstrual flow are added, especially in women.)
- **Suśruta** suggests that srotas are extremely **numerous** (countless micro-channels), but he also highlights **specific major srotas** similarly.

Clinical Note: Understanding and maintaining healthy srotas is crucial for **preventing āma (toxicity)** accumulation and ensuring balanced physiology.

Dhamanī (Arterial Vessels)

Definition

- **Dhamanī** refers to **vessels that pulsate** (the term often correlates with “arteries” in modern anatomy).
- Derived from “√dham,” meaning “to blow, expand, or pulsate,” indicating **active circulation**.



Number and Types

- **Suśruta Samhitā** (Śārīra Sthāna) mentions **24 principal dhamanīs** originating from the region of the heart (or central trunk), which then branch into numerous subdivisions.
 - 10 move **upwards** (urdhva),
 - 10 move **downwards** (adho),
 - 4 run **transversely** (tiryak).
- Each primary dhamanī further divides into many smaller channels, distributing **oxygenated blood, nutrients, or heat** throughout the body.

Functional Role

- **Transportation of Vital Nutrients:** Dhamanīs carry essential nutrients, often correlated with **oxygenated blood** or energetic substances.
- **Thermoregulation:** They help in **heat distribution**.
- **Pulsation:** By checking the pulse (nāḍī-parīkṣā in the wrist region), Vaidyas (Ayurvedic physicians) assess the **state of doṣas** and systemic health.

Śirā (Venous Vessels)

Definition

- **Śirā** are vessels that typically **do not pulsate** (often compared to “veins” in modern terminology).
- “Śirā” literally connotes “channel or conduit,” frequently carrying **blood back** toward the heart or transporting other bodily fluids.

Number and Classification

- **Suśruta** enumerates **700 śirās** in the body. This count includes **all major and minor branches** (much larger than the modern recognized count of “major veins” because Ayurveda counts finer subdivisions).
- Some texts further classify śirās by their **direction** or by the **regions** they serve (e.g., upper limbs, lower limbs, trunk, head).

Function and Clinical Significance

- **Return Flow:** Śirās facilitate the **return** of deoxygenated blood and waste-laden fluids from tissues.
- **Bloodletting (Raktamokṣa):** In Ayurvedic therapy, certain śirās are targeted for **therapeutic bloodletting** to relieve specific doṣic imbalances (especially Pitta-rakta disorders).
- **Assessment:** Distension, discoloration, or varicosity in śirās can indicate underlying pathology (e.g., varicose veins, edema).

Nāḍī (Tubes/Channels, Sometimes Nerve Pathways)

Definition

- **Nāḍī** is a general term for “**tubular structures**” in the body. In some contexts, it correlates with **nerves** or subtle energetic channels (as in Yoga philosophy).
- Etymologically derived from “nāḍ,” implying a **hollow conduit** through which **bio-impulses** or **prāṇa (life force)** circulate.

Types and Interpretations

- Ayurveda uses **nāḍī** in multiple ways:
 1. **Gross Tubes or Ducts:** E.g., bile duct, lactiferous ducts, lymphatic channels, or other small passages.
 2. **Subtle Energy Channels:** In Yoga and Tantra, references to **idā, piṅgalā, suṣumṇā** as “nāḍīs” carrying prāṇa.

3. **Nervous Pathways:** A practical approximation to **nerve fibers** in modern anatomy.

Number

- Some Ayurvedic texts mention **countless** nāḍīs branching out from certain vital centers (like the heart or umbilical region). Others specify figures like “72,000 nāḍīs” in Yogic tradition, signifying an **extensive subtle network**.
- **Suśruta** might list specific major nāḍīs (the exact enumerations can vary widely across different classical sources).

Clinical Significance

- **Nāḍī-parīkṣā (Pulse Examination):** “Nāḍī” also refers to the radial pulse reading, a fundamental diagnostic method in Ayurveda.
- **Subtle Body Work:** Practices like **prāṇāyāma**, meditation, and marma therapy aim to **unblock** or **balance** nāḍīs for optimal energetic flow.
- **Nervous System Disorders:** In a practical sense, nerve-related issues may be considered disturbances in **nāḍī**.

Interrelationship and Summary

1. **Srotas:** The overarching concept of **channels** for different body functions (respiration, digestion, excretion, tissue nourishment).
2. **Dhamanī:** Pulsating vessels akin to **arteries**, carrying blood and nutrients outward from the heart.
3. **Śīrā:** Non-pulsatile vessels akin to **veins**, returning blood or other fluids to the heart or central region.
4. **Nāḍī:** Tubular structures possibly referring to **nerve pathways**, **fine ducts**, or **subtle energy channels**.

Each system works in **concert** to maintain **circulation** (both gross physical and subtle energetic), ensure **nutrition**, remove **waste**, and facilitate **communication** within the body. Understanding their **definitions, numbers, and types** is crucial for:

- **Diagnosis** (e.g., localizing blockages in srotas, identifying vascular disorders, or nerve pathologies).
- **Therapeutics** (e.g., using specific treatments like bloodletting in certain śīrās, or herbal formulas to clear sroto-dushti).
- **Preventive care** (e.g., lifestyle and dietary measures to keep channels unobstructed and balanced).

In essence, Ayurveda’s sophisticated classification of **channels and vessels** underscores its holistic approach to **physiology**, connecting structure, function, and energetics to promote **comprehensive health**.