



## Unit 2: Ayurvedic Anatomy and Physiology in Practice

### Unit 2 — Ayurvedic Anatomy & Physiology in Practice

(Dhātus • Srotas • Marmas • Nāḍīs • Pain & treatment logic)

### Dhātus (body tissues) and their nourishment -

Ayurveda describes seven primary tissues—**rasa (plasma/lymph)**, **rakta (blood)**, **māṃsa (muscle)**, **meda (adipose)**, **asthi (bone)**, **majjā (marrow/nerve)**, **śukra/artava (reproductive essence)**—that are built and maintained in a **sequential supply chain**. Nutrients first form **rasa**, which then “feeds” **rakta**, and so on, each step governed by local **dhātu-agni** (the tissue’s metabolic capacity). When agni at any step is weak or overloaded, the next tissue is undernourished (kṣaya) and waste/by-products accumulate (āma), often presenting as dryness, poor wound healing, hair/nail fragility (asthi/majja issues), or low vigor (ojas depletion). In manual therapy, warm oils, rhythmic glides, and breath-paced holds improve capillary/lymph flow (rasa-rakta), soften fascial drag (māṃsa/meda), and calm autonomic overdrive—indirectly supporting downstream nourishment.

#### Dhātu quick-reference

Dhātu	Core role	Depletion signs (examples)	Massage focus
Rasa	First receiver/distributor	Fatigue, dryness	Warm, long glides; lymph-first
Rakta	Oxygen/heat, coloration	Pallor, irritability/heat swings	Even tempo; avoid overheating
Māṃsa	Form/motion	Weakness, myalgia	Along-fibre glides; gentle kneads
Meda	Cushion/energy	Edema, heaviness	Brisk light strokes; heat brief
Asthi	Structure/mineral	Achy joints, brittle nails	Traction; avoid jabs on capsules
Majjā	Nerve/immune marrow	Tingling, low resilience	Parasympathetic pacing; avoid sharp inputs
Śukra/Artava	Reproductive/creative	Low vigor, menstrual dysregulation	Whole-body tone; gentle abdominal work if appropriate

### Srotas (body channels) — types, function, and massage relevance -

**Srotas** are the body’s transport networks—macro to micro pathways through which nutrients, signals, wastes, and doshas move. Classics name both **systemic srotas** (e.g., **prāṇavaha** for respiration, **annavaha** for food, **udakavaha** for water, **rasa-rakta-māṃsa-...-śukravaha** for each dhātu, **mūtravaha/pūriṣavaha/svedavaha** for urine, feces, sweat) and give each a **mūla-sthāna** (root), signs of dysfunction (**sroto-duṣṭi**), and corrective measures. From a therapist’s lens: **distal→proximal limb strokes** aid venous/lymph return (rasa pathway), **intercostal work** assists prāṇavaha, **clockwise abdominal** glides help annavaha, and gentle **inguinal/axillary clearing** creates drainage “gates” before moving fluid from the periphery. Treatment of “blocked channels” blends **snehana** (oleation), **svedana** (therapeutic heat/sweat), and movement—always dosha-matched and dose-controlled.

#### Common srotas in practice

Srotas	Root (mūla; classical)	Clinic signs of duṣṭi	Bodywork emphasis
Prāṇavaha (resp.)	Heart/diaphragm	Breath shallow, rib stiffness	Rib arcs, sternum holds on exhale
Annavaḥa (GI)	Stomach/duodenum	Bloating, erratic bowels	Clockwise abdomen; pace breath
Udakavaha (fluids)	Palate/kloma	Thirst dysregulation	Hydration cues; gentle chest work
Rasa/Rakta	Heart/vessels	Cold extremities or heat spikes	Distal→proximal limb returns
Māṃsavaha	Fascia/muscle beds	Stiffness, trigger bands	Along-fibre glides; kneads
Medovaha	Flanks/abdomen	Oedema, heaviness	Brisk light strokes; brief heat
Mūtravaha / Pūriṣavaha	Bladder/colon	Retention/constipation	Diaphragm cue; avoid force



Srotas	Root (mūla; classical)	Clinic signs of duṣṭi	Bodywork emphasis
Svedavaha	Skin/sweat	Dry skin, poor heat tolerance	Oil film; dose steam prudently

## Marmas — classification, locations, therapeutic importance -

**Marmas** are 107 vital junctions where structures (muscle, vessel, ligament, bone, joint) converge and where *prāṇa* is said to be especially accessible—and vulnerable. Classics group them by **anatomy** (māṃsa, sirā, snāyu, asthi, sandhi marmas), **region** (44 in limbs, 12 trunk, 14 back, 37 head/neck), and **prognosis after injury**: **sadyaprāṇahara** (instant fatal), **kālāntara-prāṇahara** (delayed fatal), **viśalyaghna** (fatal on withdrawing an embedded object), **vaikalyakara** (disabling), and **rujakara** (pain-causing). Therapeutically, we **do not “press hard” on marmas**; we use **broad, breath-timed, oblique** contacts to calm neurovascular tone, modulate pain (gate control), and coordinate with srotas work—e.g., **Hṛdaya** for autonomic settling, **Nābhi** to quiet gut-brain loops, **Gulpha/Talahridaya** for distal grounding.

### Marma essentials

Axis	Key facts for therapists
Number & spread	107 points; limbs 44, back 14, trunk 12, head/neck 37
Anatomy classes	Māṃsa, Sirā, Snāyu, Asthi, Sandhi
Injury prognosis	Sadyaprāṇahara, Kālāntara-prāṇahara, Viśalyaghna, Vaikalyakara, Rujakara
Safety	<b>No vertical force</b> on agni marmas (Hṛdaya, Nābhi, Basti, Ādhipati); <b>oblique, graded</b> touch over sūkṣma (neurovascular) sites
Evidence signals	Reviews and pilots report pain and BP modulation with select marma protocols; mechanisms likely neurovascular/autonomic.

## Nāḍīs (energy channels) and their subtle role in Kalari Uzhichil -

Ayurvedic-yogic literature speaks of thousands of **nāḍīs—prāṇa** pathways of the subtle body. Three are primary: **Idā** (cooling, lunar, left), **Piṅgalā** (warming, solar, right), and **Suṣumnā** (central channel associated with balanced ascent of prāṇa). Nāḍīs are **not gross nerves**; they are functional/energetic routes recognized in hatha-yoga texts that outline breath practices to “purify” them. In Uzhichil, we translate this into **breath-synched pacing, left-right symmetry**, and a **central sweep** to settle the axis—practical ways to “balance Idā-Piṅgalā” and invite a Suṣumnā-like stillness at the close.

### Subtle-practice bridge

Yogic idea	Bodywork translation
Idā ↔ Piṅgalā balance	Mirror strokes left/right; equalize temperature & tone
Suṣumnā awakening	Sacrum→crown midline sweep; crown/heart “seal” on quiet breath
Nāḍī-śodhana (alt. nostril)	Cue longer exhale; time depth to exhalation for vagal bias

## Ayurvedic concept of pain and treatment approach -

Classically, **śūla/vedanā (pain)** is dominated by **Vāta** (motion/nerve principle) and worsened by **srotas obstruction (srotorodha)**—often due to **āma** or tissue congestion. Management therefore follows a **two-lane logic**:

- Normalize movement & tone (Vāta)** — *snehana* (oleation with warm oils), *svedana* (therapeutic heat/sweat), gentle joint traction and along-fibre glides; progress to mobilization and strengthening as tolerated.
- Clear obstruction (āma/srotas)** — sequence lymph/venous return (**proximal clear → distal move**), use heat judiciously, and pair with diet/rest routines that steady **agni**. In stubborn Vāta disorders (e.g., chronic low back pain), classical approaches prioritize **basti** (medicated enemas) under medical care; in bodywork scope, we focus on **rhythmical oiling, heat, and breath** to desensitize and restore range. Clinical reports within Ayurveda



journals consistently emphasize **snehana + svedana** as first-line for Vāta-pain, with marma adjuncts for modulation.

### Pain pathway map (Ayurveda → practice)

Cause lens	Typical signs	First-line measures in bodywork	Medical adjuncts (outside massage scope)
Vāta aggravation	Variable, shifting, worse with cold/dry	Warm oils, slow depth on exhale, joint traction	Basti; internal Vāta-hara formulations
Āma + srotorodha	Heaviness, stiffness, morning aggravation	Clear proximals; brief heat (kizhi/steam)	Āma-pācana (digestive) plans
Pitta-pain	Burning, hot/inflamed	Neutral-cool oils; avoid friction; light lymph	Anti-Pitta regimen; cooling herbs
Kapha-pain	Dull, heavy, oedematous	Brisk light strokes; elevation; movement	Kapha-reducing diet/exercise

### Integrating the unit in Kalari Uzhichil sessions -

- **Start with srotas logic** (clear gates, then move fluid),
- **Tune dhātu goals** (which tissue needs nourishment vs. unloading),
- **Place marma work thoughtfully** (quality over quantity),
- **Use nāḍī cues** (symmetry + midline sweep + exhale timing), and
- **Follow pain logic** (Vāta calm + obstruction clear).

Used together, these frameworks turn full-body oil work into **precise, individualized physiology in action**—grounded in classical maps and consistent with modern, safe manual practice.