

2.2. Shastra - Nirukti, Prakara, Guna, Prayog, Dosha, Karma, Anushastra and Relevant modern instruments

Unit 2. Yantra & Śastra — Topic 2. Śastra (Sharp Instruments): Nirukti, Prakāra, Guṇa, Prayoga, Doṣa, Karma, Anuśastra & Modern Mapping

1) Nirukti (Etymology) & Paribhāṣā (Definition)

Nirukti: Śastra derives from the Sanskrit root śas—śīśāsana (to discipline/operate). In Śalyatantra, Śastra denotes **tikṣṇa-upakaraṇa**—sharp-edged instruments intended for cutting, incising, scraping, puncturing and allied surgical maneuvers. Suśruta treats Śastra as the primary agents of **pradhāna-śalyakarma** (principal operative steps), complemented by Yantra (blunt aids) and Anuśastra (substitute/auxiliary tools).

2) Prakāra (Types) — The Twenty Śastra of Suśruta (Sūtrasthāna 8)

Suśruta classically enumerates **20 sharp instruments** (Śastra). Names describe their **shape/function**—a powerful memory help for viva.

#	Sanskrit name (gloss)	Classical sense	Typical modern correlate
1	Maṇḍalāgra (round-tipped knife)	Circular/rounded edge for incision & scraping	Scalpel no. 10/15 (rounder contour)
2	Karapatra (saw)	Sawing hard tissue	Bone saw / Gigli (principle)
3	Vṛddhipatra (razor/lancet)	Chedana-Bhedana (incision/excision)	Bard-Parker scalpel / razor
4	Nakhāśastra (nail-cutter)	Precise cutting	Nail clipper/special trimmer
5	Mudrikā (ring-knife)	Controlled incision in confined space	Ring knife / guarded knife
6	Utpalapatra (lotus-leaf knife)	Leaf-shaped incision	Leaf scalpel
7	Arddhadhāra (single-edged lancet)	Fine incision/excision	Lancet / beaver blade
8	Śūci (needle)	Suturing (Sīvyā)	Needles (round/triangular/curved)
9	Kuśapatra (kūśa-grass blade)	Thin secretion/scraping	Micro-knife/sickle knife
10	Ātemukha (bird-bill knife)	Beak-like tip for drainage	Tenotomy/duck-bill tools
11	Śarārimukha (bird-bill scissors)	Clipping/secretion	Scissors/clipper
12	Antarmukha (semi-circular serrate)	Saw-like inner edge	Hand saw/raspatory type
13	Trikūrchaka (trocar)	Secretion/aspiration	Trocar & cannula
14	Kuṭhārikā (small axe)	Puncture/osteotomy	Osteotome/chisel
15	Vrihīmukha (rice-grain tip)	Serrated puncture	Toothed awl/spur needle
16	Ārā (awl)	Puncturing	Surgical awl
17	Vetasapatraka (reed-leaf knife)	Puncture/incision	Leafy micro-knife
18	Vaḍīśa (barbed hook)	Extraction (āharaṇa)	Surgical hook/fish-hook
19	Danta-śaṅku (dental extractor)	Extraction of teeth	Dental elevator/forceps
20	Eṣaṇī (probe/director)	Eṣaṇā —probing/directing	Probe/director

“शस्त्राणि— मण्डलाग्र, करपत्र, वृद्धिपत्र, नखशस्त्र, मुद्रिका, उत्पलपत्र, अर्धधार, शूचि, कुशपत्र, आतमुख, शरारीमुख, अन्तरमुख, त्रिकूर्चक, कुठारिका, व्रीहिमुख, आरा, वेतसपत्रक, वडिश, दन्तशङ्कु, एशनी— इति।” — *Suśruta Saṃhitā, Sūtrasthāna 8 (Śastrāvacharaṇīya)*

How to write in exams: Quote or paraphrase the list; then pick any **5** and state one **signature use** each (e.g., *Karapatra*—bone sawing).

3) Guṇa (Desirable Qualities) of Śastra

Suśruta emphasises geometry, tempering and finish:

- **Material & make:** pure, strong iron/steel; **well-shaped; well-ground; keen, even edge; good point; secure handle and balance.**
- **Edge-task matching:**
 - **Bhedana** (excision): edge as thin as **muṣura-dāl** husk.
 - **Lekhana** (scarification/scraping): **half** as thin as **bhedana** edge.
 - **Vyādhana/Visrāvaṇa** (puncture/evacuation): edge **as fine as hair**.
 - **Chedana** (incision): **half** as thin as **vyādhana**.
- **Tempering:** **kṣāra (alkali)** for cutting arrows/bone/foreign bodies; **jala (water)** for flesh-cutting; **taila (oil)** for vein/nerve work.
- **Protection:** edges sheathed; instruments whetted on proper stones; safe storage.

Authoritative gist (Su. Sū. 8): a surgical instrument **well-ground, well-shaped, keen-edged, with convenient handle** alone deserves use; rough/jagged/uneven, too thick/thin/long/short are **rejected**.

4) Doṣa (Defects) of Śastra — What to Avoid

From Su. Sū. 8 (defective traits):

- **Vakratā** (undue curvature/off-axis), **Kuṇṭhatā** (bluntness), **Viṣamadhārā** (uneven edge), **Khara-dhārā** (rough/jagged edge), **Ati-sthūlatā** (too thick), **Ati-kṛśatā** (too thin), **Ati-dīrghatā** (too long), **Ati-hrasvatā** (too short).
- **Applied prevention:** correct sharpening protocol; **pre-use inspection** (hinges, serrations); retire deformed edges; match blade profile to tissue.

Use this list to argue instrument rejection in viva and to justify changing blades mid-case.

5) Prayoga (Clinical Use) — Map Śastra to Steps

- **Incision/Excision (Chedana-Bhedana):** Maṇḍalāgra, Vṛddhipatra, Arddhadhārā for **skin/fascia** work; **Karapatra/Kuṭhārikā** for **bone** exposure where indicated.
- **Scarification (Lekhana):** Maṇḍalāgra/Karapatra for **indurated margins**, sinus-lip; precise **edge-thickness** per Su. Sū. 8.
- **Puncture (Vyādhana):** Trikūrchaka, Ārā, Vrihīmukha, Vetasapatraka, Śūci—for **hydrocele/ascites veins** etc.
- **Evacuation (Sravya/Visrāvaṇa):** Kuśapatra, Śarārimukha, Ātemukha, Antarmukha—opened and **drained** with hair-fine edge, then **Nāḍī-yantra** for sustained drainage.
- **Extraction (Āharaṇa):** Vaḍīśa, Danta-śaṅku—solid foreign bodies/teeth; **probe (Eṣaṇī)** for direction before extraction.
- **Suturing (Sīvyā):** Śūci (**needles**)—round, triangular, or semicircular per site (joint skin, scrotum/abdomen, marma-proximate tissue) as guided in Su. Sū. 25 (sivana-vidhi).

6) Śastra-karmāṇi (Eight Operative Actions) — Ashtavidha with Indications

Suśruta's operative doctrine is the **eightfold Śastra-karma**—learn the Sanskrit names **and** one-liner indications.

1. **Chedana** (छेदन) — *Incision* to open; **Chedya** lesions listed (e.g., bhagandara, arbuda, arśa).
2. **Bhedana** (भेदन) — *Excision / cutting out* (many translators swap the English words; keep the Sanskrit clear). Useful in **vidradhi, vṛddhi, granthi, nāḍi-vraṇa**, etc.
3. **Lekhana** (लेखन) — *Scarification/scraping* of **hard, thick, elevated** margins/indurated tissue.
4. **Vyādhana** (व्याधन) — *Puncture/aspiration*, e.g., **dakodara (ascites), mūtra-vṛddhi (hydrocele)**, controlled **śirā** work.
5. **Eṣaṇā** (एषणा) — *Probing/exploration*, esp. **sinus/foreign body** tracts.
6. **Āharaṇa** (आहरण) — *Extraction/drawing out* — stones, foreign bodies, impacted stool/foetus (obstetric extraction references).
7. **Sravana/Visrāvaṇa** (स्रावण/विस्रावण) — *Evacuation/secretion* in **vidradhi/kuṣṭha**, inflamed swellings, ear-lobe disease, etc.
8. **Sivana** (सीवन) — *Suturing* of **clean** wounds after proper debridement; **needle-shapes** chosen by site (round/triangular/semicircular).

Suturing specifics (Su. Sū. 25):

- **Threads:** cotton, aśmantaka/hemp fibres, aṭasī/mūrvā/gudūcī, leather strips, horsehair, or sinews.
- **Suture patterns:** **Gophana, Tunna-sevanī, Rju-granthi**—selected by **shape/position** of the wound.
- **Needles:** round (two-aṅgula) for joints/thin tissues; trihedral (three-aṅgula) for fleshy parts; semicircular for scrotum/abdominal skin/marma zones.

7) Anuśastra (Inferior/Substitutes) — What to Use When the Knife is Unsuitable

Suśruta lists substitute instruments to **incise/excise/extract/secrete/probe** when patients are **too young, fearful**, or when **proper instruments are unavailable** (Su. Sū. 8):

- **Bamboo skin (vetasa-valka), crystal (sphatika), bits of glass (kāca), kuruvinda (corundum/quartz)** — for **incision/excision** in select contexts.
- **Nails (nakhāḥ)** — in feasible **incision/extraction** scenarios.
- **Leeches (jalaūkā), fire (agni), alkali (kṣāra)** — as **Anuśastra-karmāṇi** for **visrāvaṇa/chemo-thermal** actions (detailed in Su. Sū. 11-13).
- **Leaves (gojī, śephalika, śākapatra)** — **secretion/evacuation** in mouth/eyelid disorders.
- **Hair (keśa), corn-sprout (aṅkura), fingers (aṅguli)** — **probing (eṣaṇā)** in absence of a probe.

“वल्क-स्फटिक-काच-कुरुविन्दा जलौका-अग्नि-क्षार-नखा- गोजी-शेफालिका-शाकपत्र-अङ्कुर-केश-अङ्गुलयः— एते अनुशस्त्रसङ्ग्रहाः।”
— *Suśruta Samhitā, Sūtrasthāna 8 (sense of list)*

8) Modern Mapping — Quick Tables for OT Practice

A) Śastra → Core action → Modern substitute

Śastra	Signature action	Modern
Maṇḍalāgra / Vṛddhipatra / Arddhadhāra	Chedana-Bhedana	Scalpels, lancets



Śastra	Signature action	Modern
Karapatra / Antarmukha	Sawing/secretion	Bone saws, serrated knives
Kuṭhārikā / Ārā	Puncture/bone entry	Osteotomes, awls
Trikūrchaka	Vyādhana/aspiration	Trocar-cannula
Kuśapatra / Śārārimukha / Ātemukha	Visrāvaṇa	Scissors, drains entry
Vaḍīśa / Danta-śaṅku	Āharaṇa	Hooks, elevators, forceps
Śūci	Sīvana	Surgical needles (round, 3-edged, semicircular)
Eṣaṇī	Eṣaṇā	Probes/directors

B) Edge preparation (Su. Sū. 8) — what's "thin enough"?

- **Excision (Bhedana):** edge ~ *muṣura* husk.
- **Scraping (Lekhana):** ½ of the above.
- **Puncture/Secretion (Vyādhana/Visrāvaṇa):** hair-fine.
- **Incision (Chedana):** ½ of hair-fine.

9) Technique Pearls (from Su. Sū. 8 & 25)

- **Grips & handling:** Vṛddhipatra for scraping—with **palm slightly supinated**; **Vrihīmukha**—handle concealed in palm, blade held by **thumb-index**; **Ara/Karapatra/Eṣaṇī**—held at **roots**; **Kuṭhārikā**—supported on left, **tapped** with right (thumb & third finger).
- **Patient factors:** In kings/children/timid/delicate, prefer **Trikūrchaka** for evacuation—**less traumatic**.
- **Suturing:** Respect **marma** proximity; choose **needle body** and **pattern** accordingly; never sew **unclean** wounds—do **śodhana** first.

10) Safety — Errors (Vyāpada) and How to Prevent Them

हीनातिरिक्तं तिर्यक् च गात्रच्छेदनमात्मनः ।
एताश्चतस्रोऽष्टविधे कर्मणि व्यापदः स्मृताः ॥ — Su. Sū. 25/30

- **Hīna (under):** inadequate cut/evacuation → **re-do** with correct edge & plane.
- **Atirikta (over):** excessive cut → **hemostasis, layer-wise control**.
- **Tiryaṅ (oblique):** off-plane incision → **re-mark**, stabilize tissue.
- **Ātma-chedana (self-injury):** poor ergonomics → **correct grip**, neutral wrist, guarded blades.

General rule: **Never** incise, suture or evacuate **without eṣaṇā** (probing) when tracts are uncertain; **match edge** to tissue; **temper** blades for task.

11) Self-Check Recap (High-yield)

- **20 Śastra names** with one-liner uses (Su. Sū. 8).
- **Guṇa vs Doṣa:** keen, even edge & good handle **vs** curvature, bluntness, uneven/jagged, mis-sized (Su. Sū. 8).
- **Aṣṭavidha Śastra-karma:** **Chedana, Bhedana, Lekhana, Vyādhana, Eṣaṇā, Āharaṇa, Sravana/Visrāvaṇa, Sīvana** (Su. Sū. 25).
- **Anuśastra:** bamboo skin, crystal, glass, kuruvinda, nails, leaves, hair, finger; **leech-fire-alkali** as special substitutes (Su. Sū. 8; Su. Sū. 11-13).
- **Vyāpada (errors):** **hīna/atirikta/tiryaṅ/ātma-chedana** (Su. Sū. 25/30).



- **Edge-task rule & tempering**—quote from Su. Sū. 8 in viva.

12) Assessment

A) MCQs (Single best answer)

1. **Edge for Vyādhana/Visrāvaṇa** should be:
a) As thick as a nail b) As thin as **hair** c) As thin as *muṣura* husk d) As thick as paper
Ans: b (Su. Sū. 8)
2. **Karapatra** corresponds most closely to:
a) Lancet b) **Bone saw** c) Trocar d) Awl
Ans: b (Su. Sū. 8)
3. **Trikūrchaka** is primarily used for:
a) Suturing b) Excision c) **Puncture/evacuation** d) Scraping
Ans: c (Su. Sū. 8)
4. **Anuśastra** suitable for probing when probe is absent:
a) **Hair/corn-sprout/finger** b) Tourniquet c) Retractor d) Bandage
Ans: a (Su. Sū. 8)
5. **The four common errors** in Aṣṭavidha Śastra-karma include all **except**:
a) Hīna b) Atirikta c) **Vivecana** d) Ātma-chedana
Ans: c (Su. Sū. 25/30)
6. **Sūci** selection: a **semicircular** needle is ideal for:
a) Joint capsule b) **Scrotal/abdominal skin/marma-proximate** c) Fleshy thigh d) Nail bed
Ans: b (Su. Sū. 25)
7. **Doṣa** of Śastra that risks false tract:
a) **Vakratā** b) Mṛdutā c) Sthūlatā d) Dīrghatā
Ans: a (Su. Sū. 8)
8. **Vaḍīśa** is used chiefly for:
a) **Extraction** b) Incision c) Suturing d) Cauterisation
Ans: a (Su. Sū. 8)
9. **Lekhana** is preferred in:
a) Acute clean wounds b) **Indurated/elevated margins** c) Acute hydrocele d) Bone fracture
Ans: b (Su. Sū. 25)
10. **Tempering with alkali** is indicated when cutting:
a) Skin b) **Bone/arrow/foreign body** c) Vein d) Nerve
Ans: b (Su. Sū. 8)

B) SAQs (3-5 lines; cite Suśruta)

1. Enumerate **20 Śastra** with one function each (Su. Sū. 8).
2. Write **Guṇa** and **Doṣa** of Śastra (Su. Sū. 8) with one preventive step.
3. Define and indicate **any four** of the **Aṣṭavidha Śastra-karmāṇi** (Su. Sū. 25).
4. What are **Anuśastra**? Give **five** examples and their uses (Su. Sū. 8).
5. Explain **four vyāpada** and their prevention (Su. Sū. 25/30).

C) LAQs

1. **Śastra doctrine of Suśruta:** Nirukti → 20 Śastra (Su. Sū. 8) with geometry, edge & temper rules → **Guṇa-Doṣa** with prevention → **Aṣṭavidha Śastra-karma** (Su. Sū. 25) with indications & vyāpada → **Anuśastra** and modern mapping.
2. **From śloka to OT:** Show how **edge-task matching & tempering** (Su. Sū. 8) plus **suturing rules** (Su. Sū. 25) translate into present-day scalpel/needle selection, safe drainage and wound closure protocols.

Additional reading - Su.Su. Ch. 8

Opening & Intention (1)

अथातः शस्त्रावचारणीयमध्यायं व्याख्यास्यामः ॥१॥

Now, then, we shall expound the chapter on the handling of surgical instruments.

Authority of Dhanvantari (2)

यथोवाच भगवान् धन्वन्तरिः ॥२॥

Thus spoke the Worshipful Lord Dhanvantari.

Twenty Sharp Instruments (3)

विंशतिः शस्त्राणि, तद्यथा- मण्डलाग्रकरपत्रवृद्धिपत्रनखशस्त्रमुद्रिकोत्पलपत्रकार्धधारसूचीकुशपत्राटीमुख-
शरारिमुखान्तर्मुखत्रिकूर्चकुटारिकाव्रीहिमुखारावेतसपत्रकवडिशदन्तशङ्कुवेषण्य इति ॥३॥

There are twenty sharp instruments, namely: **maṇḍalāgra**, **karapatra**, **vṛddhipatra**, **nakhaśastra**, **mudrikā**, **utpalapatra**, **ardhadhārā**, **sūci**, **kuśapatra**, **āṭimukha**, **śārārimukha**, **antarmukha**, **trikūrcaka**, **kuṭhārikā**, **vrihimukha**, **ārā**, **vetasapatra**, **baḍīśa**, **dantaśaṅku**, and **eṣaṇī**.

Eight Operative Uses (4)

तत्र मण्डलाग्रकरपत्रे स्यातां छेदने लेखने च, वृद्धिपत्रनखशस्त्रमुद्रिकोत्पलपत्रकार्धधाराणि छेदने भेदने च, सूचीकुशपत्राटी(टा)मुखशरारिमुखान्तर्मुखत्रिकूर्चकानि
विस्त्रावणे, कुटारिकाव्रीहिमुखारावेतसपत्रकाणि व्यधने सूची च, बडिशं दन्तशङ्कुश्चाहरणे, एषण्येषणे आनुलोम्ये च, सूच्यः सीवने; इत्यष्टविधे कर्मण्युपयोगः शस्त्राणां
व्याख्यातः ॥४॥

Of these: **maṇḍalāgra** and **karapatra** are for cutting and linear incising; **vṛddhipatra**, **nail-knife**, **ring-knife**, **lotus-leaf blade**, and **half-edged blade** are for cutting and piercing; **needle**, **grass-leaf blade**, **āṭimukha**, **arrow-head blade**, **inward-curved blade**, and **trikūrcaka** serve for letting out (blood/fluids); **small axe**, **rice-grain tip**, **awl**, and **willow-leaf blade** are for puncturing—so too the **needle**; **barbed hook** and **tooth-probe** are for extraction; the **searching probe** is for probing and following the natural tract; needles are for suturing. Thus the use of instruments in the eight classes of operative actions is declared.

Grasp & Handling (5)

तेषामथ यथायोगं ग्रहणसमासोपायः कर्मसु वक्ष्यते- तत्र वृद्धिपत्रं वृन्तफलसाधारणे भागे गृह्णीयात्, भेदनान्येवं सर्वाणि, वृद्धिपत्रं मण्डलाग्रं च किञ्चिदुत्तानेन पाणिना
लेखने बहुशोऽवचार्यं, वृन्ताग्रे विस्त्रावणानि, विशेषेण तु बालवृद्धसुकुमारभीरुनारीणां राज्ञां राजमा(पु)त्राणां च त्रिकूर्चकेन विस्त्रावयेत्,
तलप्रच्छादितवृन्तमङ्गुष्ठप्रदेशिनीभ्यां व्रीहिमुखं, कुटारिकां वामहस्तन्यस्तामितरहस्तमध्यमाङ्गुल्याऽङ्गुष्ठविष्टव्याऽभिहन्यात्, आराकरपत्रेषण्यो मूले, शेषाणि तु
यथायोगं गृह्णीयात् ॥५॥

Now their grasp and handling, appropriate to each task, will be told. The **vṛddhipatra** should be held at the junction of stalk and blade; similarly all piercing instruments. The **vṛddhipatra** and **maṇḍalāgra**, with the hand slightly raised, should be frequently steadied for linear incisions. For blood-letting, grasp at the tip of the stalk; and especially in children, the aged, the delicate, the timid, women, and kings/princes, let blood with the **trikūrcaka**. Drive the **vrihimukha** with the stalk covered by the palm between thumb and index; the **kuṭhārikā**, placed in the left hand, is struck/driven using the middle finger and thumb of the other hand. Hold the **awl**, **karapatra**, and **probe** near their base; the others as suited.

Form Implied by Names (6)

तेषां नामभिरैवाकृतयः प्रायेण व्याख्याताः ॥६॥

For the most part, their very names indicate their shapes.

Standard Lengths (7)

तत्र नखशस्त्रेषण्यावष्टाङ्गुले, सूच्यो वक्ष्यन्ते, (प्रदेशिन्यग्रपर्वप्रदेशप्रमाणा मुद्रिका, दशाङ्गुला शरारिमुखी सा च (या सा) कर्तरीति कथ्यते) ।

शेषाणि तु षडङ्गुलानि ॥७॥

Here, the **nail-knife** and **searching probe** are eight āṅgulas in length; **needles** will be described later. The **mudrikā** is measured by the terminal region of the index finger; the **śārārimukhī** is ten āṅgulas and is also called **kartarī** (scissor-type). The remaining instruments are six āṅgulas.

Qualities of Good Instruments (8)

तानि सुग्रहाणि, सुलोहानि, सुधाराणि, सुरूपाणि, सुसमाहितमुखायाणि, अकरालानि, चेति शस्त्रसम्पत् ॥८॥

Excellence consists in being easy to grasp, made of good metal, well-tempered, well-shaped, with well-set tips, and not fearsome in appearance.

Defects & the Karapatra Exception (9)



तत्र वक्रं, कुण्ठं, खण्डं, खरधारम्, अतिस्थूलम्, अत्यल्पम्, अतिदीर्घम्, अतिदृक्स्वम्, इत्यष्टौ शस्त्रदोषाः ।
अतो विपरीतगुणमाददीत, अन्यत्र करपत्रात् ; तद्धि खरधारमस्थिच्छेदनार्थम् ॥९॥

Eight defects are: crooked, blunt, broken, rough-edged, too thick, too small, too long, too short. Choose the opposite qualities—**except** for **karapatra**, which should be rough/serrated for bone cutting.

Edge Thickness Standards (10)

तत्र धारा भेदनानां मासूरी, लेखनानामर्धमासूरी, व्यधनानां विस्रावणानां च कैशिकी, छेदनानामर्धकैशिकीति ॥१०॥

For edges: piercing—*masūra*-thick; linear incising—half *masūra*; puncturing and letting out—hair-fine; cutting—half hair-fine.

Hook, Tooth-Probe & Probe Tip (11)

वडिशं दन्तशङ्कुश्चानताये ।

तीक्ष्णकण्टकप्रथमयवपत्रमुख्येषणी (गण्डूपदाकारमुखी च) ॥११॥

The **barbed hook** and **tooth-probe** are bent at the tip. The **searching probe** has a very sharp thorn-like, barley-leaf-shaped mouth (also described as worm-shaped).

Threefold Quenching (12)

तेषां पायना त्रिविधा क्षारोदकतैलेषु ।

तत्र क्षारपायितं शरशल्यास्थिच्छेदनेषु, उदकपायितं मांसच्छेदनभेदनपाटनेषु, तैलपायितं सिराव्यधनस्नायुच्छेदनेषु ॥१२॥

Tempering is threefold—in **alkali**, **water**, and **oil**: alkali-tempered for cutting arrow-foreign bodies and bone; water-tempered for cutting muscle, piercing, and splitting; oil-tempered for venesection and cutting tendons.

Testing & Edge Maintenance (13)

तेषां निशानार्थं श्लक्ष्णशिला माषवर्णा; धारासंस्थापनार्थं शात्मलीफलकमिति ॥१३॥

Use a smooth stone of black-gram color to test sharpness; use a silk-cotton (śālmālī) board to set/maintain the edge.

Guiding Maxim (14)

भवति चात्र—

यदा सुनिशितं शस्त्रं रोमच्छेदि सुसंस्थितम् ।

सुगृहीतं प्रमाणेन तदा कर्मसु योजयेत् ॥१४॥

“When the instrument is sharpened enough to cut a hair, properly set, and properly grasped, then it should be applied to procedures.”

Auxiliary Implements (15)

अनुशस्त्राणि तु त्वक्सारस्फटिककाचकुरुविन्दजलौकोग्निक्षारनखगोजीशेफालिकाशाकपत्रकरीरबालाङ्गुल्य इति ॥१५॥

Auxiliaries: tough hide, crystal, glass, **kuruvinda** (red stone), leeches, fire, alkali, the nail, and the leaves of **gojī**, **śephālīka**, **śāka**, **karīra**, and the tender shoots of **bālāṅgulī**.

When to Prefer Auxiliaries (16)

शिशूनां शस्त्रभीरूणां शस्त्राभावे च योजयेत् ।

त्वक्सारादिचतुर्वर्गं छेद्ये भेद्ये च बुद्धिमान् ॥१६॥

For children, those fearful of instruments, and when instruments are lacking, the intelligent physician should use the four groups beginning with tough hide for cutting and piercing.

Use of Nail; Others Described Later (17)

आहार्यच्छेद्यभेद्येषु नखं शक्येषु योजयेत् ।

विधिः प्रवक्ष्यते पश्चात् क्षारवह्निजलौकसाम् ॥१७॥

For extractable, cuttable, or pierceable items, use the nail wherever feasible. The procedures with alkali, cautery, and leeches will be described later.

Oral & Eyelid Conditions (18)

ये स्युर्मुखगता रोगा नेत्रवर्त्मगताश्च ये ।

गोजीशेफालिकाशाकपत्रैर्विस्रावयेत्तु तान् ॥१८॥

Diseases in the mouth and those in the eyelids should be made to discharge using leaves of **gojī**, **śephālīka**, and **śāka**.

If Probe Is Unavailable (19-a)

एष्येष्वेषण्यलाभे तु बालाङ्गुल्यङ्कुरा हिताः ॥१९॥



In explorations, if a probe is not available, the tender sprouts of **bālāṅgulī** are beneficial.

Forging & Metalsmith (19-b)

शस्त्राण्येतानि मतिमान् शुद्धशैक्यायसानि तु ।

कारयेत् करणप्राप्तं कर्मारं कर्मकोविदम् ॥१९॥

A wise person should have these made of pure steel and iron by a blacksmith skilled and properly equipped for such work.

Mastery Through Practice (20)

प्रयोगज्ञस्य वैद्यस्य सिद्धिर्भवति नित्यशः ।

तस्मात् परिचयं कुर्याच्छस्त्राणां ग्रहणे सदा ॥२०॥

Success constantly attends the physician skilled in practice; therefore always cultivate familiarity with the grasp and handling of instruments.

Chapter End

इति सुश्रुतसंहितायां सूत्रस्थाने शस्त्रावचारणीयो नामाष्टमोऽध्यायः

Thus ends, in the **Suśruta-saṃhitā**, Sūtrasthāna, the eighth chapter named **Śastrāvacāraṇīya** (“On the Handling of Surgical Instruments”).