

## 5. Trividha Karma (Pre, Operative and Post Operative care)

### Unit 5. Trividha Karma (Pre-, Operative-, and Post-operative Care)

त्रिविधं कर्म—पूर्वकर्म, प्रधानकर्म, पश्चात्कर्म, तद् व्याधिं प्रत्युपदेक्ष्यामः ॥३॥  
— *Suśruta Saṃhitā*, *Sūtrasthāna 5 (Agropaharṇiya)*, śloka 3.

#### 1) Orientation: What is Trividha Karma?

**Trividha Karma** in Śalyatantra means the **three essential phases** of surgical care that ensure safety and success:

1. **Pūrvakarma** — *Before you cut*: patient, instrument, and environment preparation with consent and planning.
2. **Pradhānakarma** — *During the operation*: execution of **Aṣṭavidha Śāstra-karma** aided by Yantra-karma.
3. **Paścātkarman** — *After you finish*: recovery, wound care, analgesia, monitoring, documentation, and follow-up.

You will score by explicitly naming these three, then showing how you apply **Suśruta's verses** to each phase.

#### 2) Pūrvakarma — Preparing the patient, instruments, and procedure

##### 2.1 Patient preparation (clinical checklist)

- **Identity & procedure verification**: site marking.
- **History & exam**: comorbidities (cardio-pulmonary, renal, hepatic, endocrine), allergies, meds (anticoagulants/antiplatelets, SGLT2 inhibitors), previous anaesthetic issues.
- **ASA class & functional status**: airway assessment.
- **Investigations** as indicated (Hb, sugar, RFT, ECG; imaging as per case).
- **Optimisation**: BP/DM control, anaemia correction, smoking cessation ≥4 weeks, nutrition.
- **Fasting**: 2–4–6 rule (clear fluids–breastmilk–light solids).
- **Prophylaxis**: antibiotics within 60 min of incision (agent per protocol), DVT measures, glycaemic & thermal control.
- **Consent**: see Section 5.

##### Classical environment:

Quote and explain *Su. Su. 19/5 (Vraṇitāgāra)*: **asambādha** (spacious), **sastīrṇa** (clean linen/draping), **manojña** (light/ventilation), **prākśīraska** (consistent head-end orientation), **saśāstra** (instruments ready). This mirrors modern **OT zoning, lighting, sterile sets**.

##### 2.2 Instrument & OT readiness (quality and sterility)

- **Instrument sets** mapped to classical **Yantra** groups (Saṃdaṃśa, Śalākā, Nāḍī, Tāla, Svastika, Upayantra) — *Su. Su. 7/5–6*.
- **Sterilization** validated (steam preferred for metals; BI/CI logs). Hinges open; heavy items low in trays; count and integrity checks.
- **Upayantra** in place: lights, drapes, tourniquet, pads, trays, suction — justified by their explicit inclusion in *Su. Su. 7/5–6*.
- **Team brief** (WHO checklist): roles, antibiotics, VTE plan, anticipated blood loss, rescue plans.

##### 2.3 Procedure planning

- **Steps script**: incision line/planes, dissection strategy, haemostasis methods, potential **Aṣṭavidha** components

(e.g., *Chedana*, *Lekhana*, *Śravaṇa*, *Sīvana*), drains, dressing plan.

- **Equipment map to Yantra-karmāṇi** (*Su. Su. 7/17*): e.g., **Eṣaṇā** (probe), **Cūṣaṇa** (suction), **Prakṣāḷana** (irrigation), **Āharaṇa** (extraction) etc.

**Use in exam:** Write “Pūrvakarma aligns with *Su. Su. 19/5* for ward/OT set-up and *Su. Su. 7/5–6* for making the instrument ecosystem ready.”

### 3) Pradhānakarma — Doing the operation (Aṣṭavidha Śāstra-karma) with Yantra support

#### 3.1 Aṣṭavidha Śāstra-karma — the eight operative actions

सुश्रुतसंहिता, सूत्रस्थान 5/5 — अष्टविध शस्त्रकर्म

तच्च शस्त्रकर्माष्टविधं । तद्यथा— छेदं, भेदं, लेख्यं, वेध्यम्, एष्यम्, आहार्यम्, विस्त्राव्यं, सीव्यमिति ॥

- **Chedana** (छेदन) — Incision to open access; choose proper blade/plane.
- **Bhedana** (भेदन) — Cutting out/excision of diseased tissue.
- **Lekhana** (लेखन) — Scarification/scraping of indurated/elevated tissue.
- **Vyādhana** (व्याधन) — Puncture/aspiration (e.g., hydrocele).
- **Eṣaṇā** (एषणा) — Probing/sinus exploration.
- **Āharaṇa** (आहरण) — Extraction (foreign body/stone/tooth).
- **Śravaṇa/Visrāvaṇa** (स्रावण/विस्त्रावण) — Evacuation/drainage.
- **Sīvana** (सीवन) — Suturing/repair after proper śodhana.

**Errors to avoid (quote and explain):**

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

*Hīna* (inadequate), *Atirikta* (excess), *Tiryak* (oblique/off-plane), *Ātma-chedana* (self-injury).

**Prevention:** correct marking, retraction, haemostasis, instrument selection, ergonomic grip.

#### 3.2 Yantra-karmāṇi (24 actions) in the theatre

“यन्त्रकर्माणि तु— निर्घातन...प्रमार्जनानि चतुर्विंशतिः ॥” — *Su. Su. 7/17*

You should be able to say which **Yantra action** you use at a given step:

- **Eṣaṇā** (probe) before incision into a sinus;
- **Cūṣaṇa** (suction) and **Prakṣāḷana** (irrigation) during drainage;
- **Āharaṇa/Vikarṣaṇa** (extraction/traction) with *Samdaṃśa*;
- **Bandhana/Piḍana** (compression/dressings) before closure;
- **Rjūkaraṇa/Vivaraṇa** (align/open) to improve exposure.

#### 3.3 Intra-operative safety

- **Counts** (sponges/needles/instruments) before close.
- **Antibiotics** re-dose as per duration/blood loss.
- **Specimen labelling** and documentation.

- **Analgesia plan** (local infiltration/blocks + systemic multimodal).
- **Drain** rationale & secure fixation.

## 4) Paścātkarman — Post-operative care

### 4.1 Immediate (PACU)

- **Airway, breathing, circulation**; pain, PONV, temperature, urine output.
- **Analgesia**: paracetamol/NSAIDs unless contraindicated; opioids titrated; consider regional catheter if planned.
- **Antibiotics** per procedure; avoid unnecessary prolongation.
- **DVT prophylaxis** (mechanical/pharmacologic).
- **Communication**: operative findings, drains, special instructions.

### 4.2 Wound & drain care

- **Dressing**: clean, dry; first review at 24–48 h unless indicated earlier.
- **Signs of complication**: redness, discharge, fever, disproportionate pain—prompt review.
- **Drain**: output chart; remove when < specified threshold and serous.

### 4.3 Enhanced recovery (ERAS-aligned)

- Early oral intake as tolerated, early mobilisation, incentive spirometry, glycaemic control, normothermia.

### 4.4 Discharge & follow-up

- **Advice**: wound care, activity limits, red-flag symptoms, medication list.
- **Review** timing and suture removal day (site-dependent).
- **Documentation** complete and legible; operative note, consent, device/implant stickers, counts reconciliation.

**Classical echo:** *Su. Su. 19/5* supports clean, orderly recovery spaces (**manojña, asambādha**), with necessary **saśāstra** materials on hand for dressings.

## 5) Informed Consent — Steps in a patient/simulated environment

1. **Identify** patient; ensure decision-making capacity (or appropriate surrogate).
2. **Explain the condition** in simple terms: diagnosis and why a procedure is needed.
3. **Describe the procedure** (what will be done, by whom, where).
4. **Discuss benefits, material risks** (common & serious), and **alternatives** (including no procedure).
5. **Anaesthesia plan** basics and specific risks (LA/RA/GA).
6. **Peri-operative care** expectations: fasting, hospital stay, pain plan, drains, possible blood transfusion/ICU if relevant.
7. **Questions encouraged**; check **understanding** (teach-back).
8. **Voluntariness** confirmed; **right to refuse/withdraw** stated.
9. **Document**: language used, interpreter if any; name & designation of explainer; date/time; witness where mandated.
10. **Signatures**: patient (or guardian), explainer, witness; provide a copy.

**Special situations:** minors, impaired capacity, emergencies (implied consent to life-saving interventions), language barriers (certified translation).



## 6) Observing/Assisting — What a 3rd BAMS student must do

### 6.1 Observe common procedures

- Incision & drainage, excision of small swellings, wound debridement & primary closure, hernia incision exposure, drain placement/removal, abscess dressings, suturing techniques and knot-tying, application of splints.

### 6.2 Assist in minor surgical procedures

- Maintain sterile field; pass instruments correctly; handle tissue gently; suction/irrigation; retraction; cut suture to correct length; prepare dressings.

### 6.3 Observe emergency life-saving procedures

- Tube thoracostomy set-up, cricothyrotomy tray preparation, control of external haemorrhage (pressure, tourniquet), reduction/splintage, FAST scan assistance (if trained), CPR team roles.

**Ethics & safety:** assist **only under supervision**; escalate concerns; document honestly; respect confidentiality.

## 7) High-yield tables for viva

### 7.1 Linking Aṣṭavidha to instruments & Yantra-karmāṇi

Śastra-karma	Typical step	Yantra-karma assist (Su. 7/17)	Examples
<b>Chedana</b>	Skin incision	<b>Vivaraṇa/Vivartana</b>	Retractors/skin hooks
<b>Bhedana</b>	Excision	<b>Vikarṣaṇa/Āharaṇa</b>	Forceps traction & removal
<b>Lekhana</b>	Scarify margins	<b>Pramāṛjana/Prakṣāḷana</b>	Swabs/irrigation
<b>Vyādhana</b>	Puncture	<b>Cūṣaṇa</b>	Trocar + suction
<b>Eṣaṇā</b>	Probe tracts	<b>Rjūkaraṇa</b>	Probes/directors
<b>Āharaṇa</b>	Extract foreign body	<b>Piḍana/Bandhana</b>	Compression then dressing
<b>Sravana</b>	Drain pus	<b>Mārga-viśodhana/Nāḍī</b>	Irrigation & drain
<b>Sivana</b>	Suture/repair	<b>Bandhana</b>	Dressings/splints

### 7.2 Post-operative red flags

Fever, tachycardia, hypotension, increasing pain, purulent discharge, ileus not resolving, calf swelling (DVT), breathlessness (PE), oliguria—**act early**.

## 8) Rapid Recap (speak out in 45 seconds)

“**Trividha Karma** = **Pūrvakarma** (patient-instrument-procedure prep aligned to *Su. Su. 19/5* and *7/5-6*), **Pradhānakarma** (execute **Aṣṭavidha Śastra-karma**, *Su. Su. 25/1*, assisted by **Yantra-karmāṇi**, *Su. Su. 7/17*, while avoiding **vyāpada**, *Su. Su. 25/30*), and **Paścātkarman** (ERAS-aligned recovery, wound/drain care, documentation). **Consent** and **checklists** make it safe and ethical.”

## Assessment

### A. MCQs (Single Best Answer)

1. The **Vraṇitāgāra** verse that supports ward/OT set-up is from:  
a) Su. Su. 7/17 b) **Su. Su. 19/5** c) Su. Su. 25/1 d) Su. Su. 7/4
2. **Which phase** explicitly includes obtaining consent and antibiotic prophylaxis?  
a) **Pūrvakarma** b) Pradhānakarma c) Paścātkarman d) None
3. **Eṣaṇā** must precede exploration of a sinus. This action is catalogued under:  
a) Aṣṭavidha Śāstra-karma b) **Yantra-karmāṇi (Su. 7/17)** c) Vyāpada d) Upayantra doṣa
4. **Hina-karma** in Su. Su. 25/30 refers to:  
a) Over-incision b) **Inadequate operation** c) Oblique incision d) Surgeon self-injury
5. Packing a cavity and applying compression after drainage correspond to:  
a) **Pūraṇa & Piḍana** (Su. 7/17) b) Āharaṇa & Eṣaṇā c) Vyādhana & Sīvana d) Bhedana & Lekhana
6. A drain placed with irrigation intra-op is best justified by:  
a) Su. Su. 7/4 alone b) **Mārga-viśodhana/Prakṣāḷana & Sravana (Su. 7/17; Su. 25)** c) Su. Su. 19/5 only d) Su. Su. 25/30 only
7. The **WHO safety checklist** belongs most appropriately to:  
a) **Pūrvakarma & Pradhānakarma** b) Pradhānakarma only c) Paścātkarman only d) None
8. After closure, ensuring correct instrument/sponges count falls under:  
a) **Pradhānakarma (before leaving OT)** b) Pūrvakarma c) Paścātkarman only d) Irrelevant
9. Early mobilisation and analgesia titration belong to:  
a) Pūrvakarma b) Pradhānakarma c) **Paścātkarman** d) None
10. The purpose of **Upayantra** in OT is best captured by:  
a) Cutting tissue b) **Assisting main actions (lights, drapes, tourniquet, trays)** c) Suturing d) Bone sawing

**Answers:** 1-b, 2-a, 3-b, 4-b, 5-a, 6-b, 7-a, 8-a, 9-c, 10-b.

### B. Short Answer Questions (3-5 lines each)

1. Define **Trividha Karma** and list two items each under **Pūrvakarma**, **Pradhānakarma**, **Paścātkarman** with scriptural references.
2. Enumerate **Aṣṭavidha Śāstra-karma** (Su. Su. 25) and write one line on **vyāpada** with prevention.
3. Map any **five Yantra-karmāṇi** (Su. Su. 7/17) to the tools you will set out on your tray.
4. Write a concise **post-operative order set** for a drained abscess with a dependent drain.
5. Steps of **informed consent** for a minor excision under local anaesthesia.

### C. Long Answer Questions

1. Discuss **Trividha Karma** for an **inguinal hernia repair**: pre-op assessment and consent (with Su. Su. 19/5, 7/5-6), intra-operative plan referencing **Aṣṭavidha Śāstra-karma** (Su. Su. 25/1) and **Yantra-karmāṇi** (Su. Su. 7/17), avoidance of **vyāpada** (Su. Su. 25/30), and comprehensive **Paścātkarman** including ERAS elements.
2. "**Classical doctrine, modern safety.**" Justify instrument preparation with Su. Su. 7/5-6, environmental readiness with Su. Su. 19/5, action selection with Su. Su. 7/17 and Su. Su. 25, and show how these translate into today's **WHO checklist**, counts, drains, analgesia, and documentation.

### Final line for your answer sheet

Name the phase (**Pūrvakarma-Pradhānakarma-Paścātkarman**), drop one **Suśruta** verse for that phase, then narrate the exact clinical step. This is how you demonstrate **text-anchored, patient-safe** surgery in BAMS exams.

## Additional reading - Sushruta Sutra Ch 25

### Opening & Authority

अथातोऽष्टविधशस्त्रकर्मयिमध्यायं व्याख्यास्यामः ॥१॥

यथोवाच भगवान् धन्वन्तरिः ॥२॥

Now, then, I will expound the chapter on the eight kinds of surgical procedures. Thus spoke the venerable Lord Dhanvantari.

### Chedya — to be excised (cut out)

छेद्या भगन्दरा ग्रन्थिः श्लैष्मिकस्तिलकालकः ।

व्रणवर्त्मावुदान्यर्शश्चर्मकीलोऽस्थिमांसगम् ॥३॥

शल्यं जतुमणिमांससङ्घातो गलशुण्डिका ।

स्नायुमांससिराकोथो वल्मीकं शतपोनकः ॥४॥

अधृषश्चोपदंशाश्च मांसकन्द्यधिमांसकः ॥५॥

To be excised: fistula-in-ano (bhagandara), nodules/tumors (granthi), kapha-type nevi (tila-kālaka), indurated ulcer-margins (vraṇa-vartma), tumors (arbuda), hemorrhoids (arśas), skin tags (carmakīla), bony/fleshy masses; foreign bodies, tar/stone-like nodules, fleshy conglomerates, goiter-like swellings, indurations of tendons/muscles/vessels, ant-hill-like sinuses (valmīka), multiple-pored lesions (śataponaṅka), and also adhruṣa, venereal chancres (upadaṁśa), fibrous/fleshy overgrowths (māṁsa-kandī, adhi-māṁsaka).

### Bhedya — to be incised (opened)

भेद्या विद्रधयोऽन्यत्र सर्वजादग्रन्थयस्त्रयः ॥६॥

आदितो ये विसर्पाश्च वृद्धयः सविदारिकाः ।

प्रमेहपिडकाः शोफः स्तनरोगोऽवमन्थकाः ॥६॥

कुम्भीकानुशयी नाड्यो वृन्दौ पुष्करिकाऽलजी ।

प्रायशः क्षुद्ररोगाश्च पुष्पुटौ तालुदन्तजौ ॥७॥

तुण्डिकेरी गिलायुश्च पूर्वं ये च प्रपाकिणः ।

बस्तिस्तथाऽश्मरीहेतोर्मदोजा ये च केचन ॥८॥

To be incised: abscesses (vidradhi) and the three doṣic kinds of granthi at suitable sites; early erysipelas/spreading swellings (visarpa) and enlargements that crack; carbuncles of prameha, edemas, breast disorders, avamanthaka; kumbhikā, dependent sinuses (anuśayī nāḍī), paired/clustered tracts (vṛndau), puṣkarikā and alajī (oral lesions), many minor disorders, alveolar and palatal/dental pus-collections, tonsillar abscess (tuṇḍikerī), goitrous swellings (gilāyu), lesions that are ripening, and bladder/fatty cystic swellings and those due to stones.

### Lekhya — to be scraped

लेख्याश्चतस्रो रोहिण्यः किलासमुपजिह्विका ।

मेदोजो दन्तवैदर्भो ग्रन्थिवर्त्माधिजिह्विका ॥९॥

अर्शासि मण्डलं मांसकन्दो मांसोन्नतिस्तथा ॥१०॥

To be scraped: the four rohiṇī throat lesions, leucoderma (kilāsa), sublingual swelling (upajihvikā), fatty overgrowths, gum disease (danta-vaidarbha), granthi, eyelid/tongue masses; ring-type piles, fibrous overgrowths, and raised fleshy lesions.

### Vedhya — to be punctured/venesected

वेध्याः सिरा बहुविधा मूत्रवृद्धिर्दकोदरम् ॥१०॥

To be punctured/venesected: various veins; urinary/vesical enlargements and ascites (udakodara).

### Eṣyā — to be probed/explored

एष्या नाड्यः सशल्याश्च व्रणा उन्मार्गिणश्च ये ॥११॥

To be probed: sinus tracts; wounds containing foreign bodies; wounds that have formed false passages.

### Āhārya — to be extracted/removed

आहार्याः शर्करास्तिष्ठो दन्तकर्णमलोऽश्मरी ॥११॥

शल्यानि मूढगर्भाश्च वर्चश्च निचितं गुदे ॥१२॥

To be extracted: three kinds of “gravel” (calculi), impacted tooth/ear matter and urinary stones; foreign bodies; obstructed fetus; and impacted feces lodged in the rectum.

### Srāvya — to be drained/let out

स्राव्या विद्रधयः पञ्च भवेयुः सर्वजादृते ॥१२॥

कुष्ठानि वायुः सरुजः शोफो यश्चैकदेशजः ।  
पाल्यामयाः श्लीपदानि विषजुष्टं च शोणितम् ॥१३॥  
अर्बुदानि विसर्पाश्च ग्रन्थयश्चादितश्च ते ।  
त्रयस्त्रयश्चोपदंशाः स्तनरोगा विदारिका ॥१४॥  
सु(शु)षिरो गलशालूकं कण्टकाः कृमिदन्तकः ।  
दन्तवेष्टः सोपकुशः शीतादो दन्तपुप्पुटः ॥१५॥  
पित्तासृक्कफजाश्चौष्टयाः क्षुद्ररोगाश्च भूयशः ॥१६॥

To be drained: five kinds of abscesses (except the universal type); skin diseases (kuṣṭha), painful vāta conditions, localized swellings; disorders requiring fomentation, elephantiasis, blood vitiated by poison; tumors, erysipelas, nodules; the three types of venereal sores; breast diseases; tearing carbuncles (vidārikā); perforations/ulcerations, swollen uvula/tonsil (galaśālūka), thorn-like bodies and wormy tooth disease; periodontal swellings with gum-boil, cold-toothache, dental pustules; lip disorders of pitta, blood and kapha types, and many minor ailments.

### Sivya — to be sutured

सीव्या मेदःसमुत्थाश्च भिन्नाः सुलिखिता गदाः ॥१६॥  
सद्योन्ननाश्च ये चैव चलसन्धिव्यपाश्रिताः ॥१७॥

To be sutured: lacerations and clean-cut wounds (well-defined gashes), those arising from fatty tissue injuries, fresh wounds, and wounds involving mobile joints.

### When not to suture & cleansing

न क्षाराग्निविषैर्जुष्टा न च मारुतवाहिनः ॥१७॥  
नान्तर्लोहितशल्याश्च ... तेषु सम्यग्विशोधनम् ॥१८॥

Do not suture lesions affected by caustics, cautery or poison, nor those carrying air (vāta-traversed channels), nor those with internal bleeding/foreign bodies; these require proper cleansing first.

पांशुरोमनखादीनि चलमस्थि भवेच्च यत् ॥१८॥  
अहृतानि यतोऽमूनि पाचयेयुर्भृशं व्रणम् ।  
रुजश्च विविधाः कुर्युस्तस्मादेतान् विशोधयेत् ॥१९॥

Dust, hairs, nail-parings and the like—and loose bone fragments—if left inside will cause profuse suppuration and varied pains; therefore these must be removed/cleansed.

### Suture materials & methods

ततो व्रणं समुन्नम्य स्थापयित्वा यथास्थितम् ।  
सीव्येत् सूक्ष्मेण सूत्रेण वल्केनाश्मन्तकस्य वा ॥२०॥  
शणजक्षौमसूत्राभ्यां स्नाय्वा बालेन वा पुनः ।  
मूर्वागुडूचीतानैर्वा सीव्येद्वेल्लितकं शनैः ॥२१॥  
सीव्येद्गोफणिकां वाऽपि सीव्येद्वा तुन्नसेवनीम् ।  
ऋजुग्रन्थिमथो वाऽपि यथायोगमथापि वा ॥२२॥

Then, after adjusting the wound edges, suture with fine thread—of bark or asmantaka fiber; or with flax/linen thread, or tendon, or (child's) hair; or fibers of mūrva and guḍūcī. Stitch gently, by spiral (vellitaka), looped (gophaṇikā), continuous (tunna-sevānī), or simple interrupted (ṛju-granthi), as appropriate.

### Needles — shapes, use & spacing

देशेऽल्पमांसे सन्धौ च सूचीर् वृत्ताङ्गुलद्वयम् ।  
आयता त्र्यङ्गुला त्र्यस्रा मांसले चाऽपि पूजिता ॥२३॥  
धनुर्वक्रा हिता मर्मफलकोशोदरोपरि ।  
इत्येतास्त्रिविधाः सूचीस् तीक्ष्णाग्राः सुसमाहिताः ॥२४॥  
कारयेन्मालतीपुष्पवृन्ताग्रपरिमण्डलाः ।  
नातिदूरे निकृष्टे वा सूचीं कर्मणि पातयेत् ॥२५॥  
दूराद् रुजो व्रणौष्ठस्य सन्निकृष्टेऽवलुञ्चनम् ॥२६॥

At sites with little flesh and at joints, use a round needle about two finger-breadths; for fleshy regions, an elongated, three-finger, triangular one is valued; a bow-curved needle suits vital areas, scrotum and abdomen. These three types should be sharp and well set, with tips circular like the stalk of a mālatī flower. Do not take bites too far apart or too close: too far causes pain at the wound-lip, too close causes cutting/tearing of the margin.

### Dressing & after-care

अथ क्षौमपिचुच्छन्नं सुस्यूतं प्रतिसारयेत् ।

प्रियङ्गवज्जनयष्ट्याह्वरोधचूर्णेः समन्ततः ॥२७॥  
शल्लकीफलचूर्णैर्वा क्षीमध्यामेन वा पुनः ।  
ततो व्रणं यथायोगं बद्ध्वाऽऽचारिकमादिशेत् ॥२८॥

Cover the well-sutured wound with a linen pad and dust around with powders of priyangu, collyrium, yaṣṭyāhva (liquorice), and rodhra; or with salaki-fruit powder; or cover again with a thin linen. Then bandage appropriately and prescribe regimen.

#### Eight procedures named; details elsewhere

एतदष्टविधं कर्म समासेन प्रकीर्तितम् ।  
चिकित्सितेषु कात्स्न्येन विस्तरस्तस्य वक्ष्यते ॥२९॥

Thus the eight procedures are briefly declared; their full detail will be told in the Therapeutics.

#### Four mishaps to avoid

हीनातिरिक्तं तिर्यक् च गात्रच्छेदनमात्मनः ।  
एताश्चतस्रोऽष्टविधे कर्मणि व्यापदः स्मृताः ॥३०॥

The four mishaps are: doing too little, too much, obliquely, and cutting one's own limb.

#### Warning against unskilled practice

अज्ञानलोभाहितवाक्ययोगभयप्रमोहेरपैश्च भावैः ।  
यदा प्रयुञ्जीत भिषक् कुशस्त्रं तदा स शेषान् कुरुते विकारान् ॥३१॥

Through ignorance, greed, bad counsel, misapplication, fear, or confusion, if a physician uses the knife, he creates further disorders.

तं क्षारशस्त्राग्निभिरौषधैश्च भूयोऽभियुञ्जानमयुक्तियुक्तम् ।  
जिजीविषुर्दूरत एव वैद्यं विवर्जयेदुग्रविषाहितुल्यम् ॥३२॥

One who repeatedly applies caustics, knife, cautery, and drugs without proper reasoning—anyone wishing to live should shun such a doctor from afar, as one avoids deadly poison.

तदेव युक्तं त्वति मर्मसन्धीन् हिंस्यात् सिराः स्नायुमथास्थि चैव ।  
मूर्खप्रयुक्तं पुरुषं क्षणेन प्राणैर्वियुञ्ज्यादथवा कदाचित् ॥३३॥

Even rightly used, if applied on vital spots and joints it injures veins, sinews, and bone; in a fool's hand it may deprive a person of life in a moment.

#### Signs of serious (vāta/marma) injury

भ्रमः प्रलापः पतनं प्रमोहो विचेष्टनं संलयनोष्णते च ।  
म्रस्ताङ्गता मूर्च्छनमूर्ध्ववातस् तीव्रा रुजो वातकृताश्च तास्ताः ॥३४॥

Dizziness, delirium, collapse, fainting, abnormal movements, chill/heat changes, limb-droop, syncope, upward rush of vāta, and severe pains—these are vāta-induced effects.

मांसोदकाभं रुधिरं च गच्छेत् सर्वेन्द्रियार्थोपरमस्तथैव ।  
दशार्धसङ्ख्येष्वपि विक्षतेषु सामान्यतो मर्मसु लिङ्गमुक्तम् ॥३५॥

Blood becomes watery like meat-wash; the functions of all senses cease—these are general signs of marma injury even with a (small) number of wounds.

सुरेन्द्रगोपप्रतिमं प्रभूतं रक्तं स्रवेद्वै क्षततश्च वायुः ।  
करोति रोगान् विविधान् यथोक्तांश्छिन्नासु भिन्नास्वथवा सिरासु ॥३६॥

Profuse bright-red blood flows; vāta from the wound produces various disorders when veins are cut or ruptured.

कौब्ज्यं शरीरावयवावसादः क्रियास्वशक्तिस्तुमुला रुजश्च ।  
चिराद्गणो रोहति यस्य चापि तं स्नायुविद्धं मनुजं व्यवस्येत् ॥३७॥

Contractures, drooping of body parts, incapacity for actions, severe pains, and very slow healing—know this as tendon injury.

शोफातिवृद्धिस्तुमुला रुजश्च बलक्षयः पर्वसु भेदशोफौ ।  
क्षतेषु सन्धिष्वचलाचलेषु स्यात् सन्धिकर्मोपरतिश्च लिङ्गम् ॥३८॥

Excessive swelling, severe pain, loss of strength, splitting pain and swelling at joints; in wounds of mobile or immobile joints, loss of joint function is the sign.

घोरा रुजो यस्य निशादिनेषु सर्वास्ववस्थासु न शान्तिरस्ति ।  
तृष्णाङ्गसादौ श्वयथुश्च रुक् च तमस्थिविद्धं मनुजं व्यवस्येत् ॥३९॥

Unremitting pains (day and night), thirst, limb-lassitude, swelling and ache—recognize bone injury.

#### Note on muscle-marma

यथास्वमेतानि विभावयेच्च लिङ्गानि मर्मस्वभिताडितेषु ॥४०॥  
स्पर्शं न जानाति विपाण्डुवर्णो यो मांसमर्मण्यभिताडितः स्यात् ॥४०॥

These signs should be judged according to the marma struck. One who has a muscle-marma injury becomes very pale and loses tactile sensation.

#### **Ethic: avoid the quack; physician's care**

आत्मानमेवाथ जघन्यकारी शस्त्रेण यो हन्ति हि कर्म कुर्वन् ।  
तमात्मवानात्महनं कुवेद्यं विवर्जयेदायुरभीप्समानः ॥४१॥

He who, while operating, wounds himself is a wretched self-hurting quack; one who desires long life should avoid him.

तिर्यक् प्रणिहिते शस्त्रे दोषाः पूर्वमुदाहृताः ।  
तस्मात् परिहरन् दोषान् कुर्याच्छस्त्रनिपातनम् ॥४२॥

Oblique application of the knife brings the faults mentioned; therefore avoid them and make the incision properly.

मातरं पितरं पुत्रान् बान्धवानपि चातुरः ।  
अप्येतानभिश्चङ्केत वैद्ये विश्वासमेति च ॥४३॥

विसृजत्यात्मना ऽऽत्मानं न चैनं परिशङ्कते ॥४४॥  
तस्मात् पुत्रवदेवैनं पालयेदातुरं भिषक् ॥४४॥

The skillful physician inspires such confidence that even parents, children, and kin feel no fear in him and entrust themselves completely; therefore the physician should tend the patient like his own son.

#### **Merit & therapeutic principle**

धर्माथौ कीर्तिमित्यर्थं सतां ग्रहणमुत्तमम् ।  
प्राप्नुयात् स्वर्गवासं च हितमारभ्य कर्मणा ॥४५॥

By undertaking beneficent work one gains virtue, prosperity, and the esteem of the noble—and may attain heaven.

कर्मणा कश्चिदेकेन द्वाभ्यां कश्चित्त्रिभिस्तथा ।  
विकारः साध्यते कश्चिच्चतुर्भिरपि कर्मभिः ॥४६॥

Some disorders are cured by one procedure, some by two, some by three, and some even by four.

#### **Colophon**

इति सुश्रुतसंहितायां सूत्रस्थाने ऽष्टविधशस्त्रकर्मियो नाम पञ्चविंशो ऽध्यायः ॥२५॥

Thus ends, in the Suśruta-saṃhitā, Sūtrasthāna, the twenty-fifth chapter named “On the Eight Types of Surgical Procedures.”