

6.5. Demonstration of Chhedan (Excision), Bhedan (Incision), Lekhan (Scraping) on patient/ simulator

Unit 6.5 — Demonstration of Chedana (Excision), Bhedana (Incision), and Lekhana (Scraping) on Patient/Simulator

You will **see-do-explain** three śastrakarmas in a safe, reproducible way. Each skill is anchored to **Suśruta Samhitā** ślokas (Devanāgarī with chapter/verse), mapped to modern instruments, and packaged as step-by-step checklists suitable for patient or simulation lab.

What you will be able to do after this session

- **Identify** the right indication and timing for **Chedana, Bhedana, Lekhana** with verse support.
- **Perform** each procedure on a simulator/patient using sterile technique, correct incision geometry, and tissue-respecting handling.
- **Avoid** classic **vyāpada** (complications) by applying Suśruta's cautions on marma, timing, and wound preparation.
- **Close/dress** appropriately and order post-procedure care.

DEMONSTRATION 1 — Chedana (Excision)

Indications (state with verse)

Quote **Su. Su. 25/3-4** to justify excision for **granthi, tilakalaka, charmakila, arbuda, arsa**, selected fistula-in-ano components (**bhagandara**), **mamsa-kandī/adhimamsa**, etc.

Step-by-step (say-do)

1. **Confirm lesion & plane**; mark margins; choose **tiryak** lines if on face/axilla/groin (*Su. Su. 5/13*).
2. **Infiltrate LA**; wait adequate onset.
3. **Skin entry with #15 (face) / #10 (trunk)**; maintain **atraumatic retraction**.
4. **Excision**: elliptical for skin tags/warts; stay in safe plane; **hemostasis** by pressure/ligature; avoid marma/sirā/snāyu (*Su. Su. 5/7; 25/33*).
5. **Specimen handling** (if biopsy): orientation stitch, label.
6. **Wound toilet**: irrigate (**prakṣālana**), mop (**pramārjana**), remove debris per **25/18-19**.
7. **Assess vrana-guṇa**: edges **even (sama)**, **clear (suvibhakta)**, **pocket-free (nirāśraya)** (*5/8-9*).
8. **Sīvana**: simple interrupted or subcuticular per site tension; evert edges; avoid strangulation (prevents **mamsakandī**, *5/15*).
9. **Dressing**; post-op instructions.

Common pitfalls to avoid

- **Excess or inadequate excision** → “**hīna-atirikta**” **vyāpada** (*25/30*).
- **Wrong incision geometry** on face/groin/palm/anal → pain, delay, proud flesh (*5/15*).
- **Ignoring nerves/vessels** → **marma** injury warning (*25/33*).

Other excision demonstrations for reference -

DEMONSTRATION 2 — Bhedana (Incision)

Indications (state with verse)

Use **Su. Su. 25/5-8**: **vidradhi (abscess) except sarvaja**, selected **vrddhi** (e.g., hydrocele—often puncture/vedhana or open bhedana depending on case), **nādī** conditions, **prameha-piḍakā**, oral/ENT pustular states, selected bladder/stone contexts.

Timing & entry rule (quote)

“... परिहन् ... आपूयदर्शनात्, सकृदेवापहरेच्छस्त्रम् ...” — *Su. Su. 5/7*

→ Avoid marma; open **only** when **ripe** (pus evident); **one decisive entry**, then withdraw.

Step-by-step (say-do)

1. **Clinical confirmation of pakva** (fluctuation, pointing) ± ultrasound if available.
2. **Mark incision respecting site geometry:**
 - **Tiryak** (face/axilla/groin/abdomen, etc.) — *Su. Su. 5/13*.
 - **Circular** (palm/sole) — 5/14.
 - **Semilunar** (anal/penile) — 5/15.
3. **Infiltrate LA** around the cavity; avoid injecting into pus pocket.
4. **Entry: #11 stab** or small linear cut at most dependent point; allow **visrāvāṇa**.
5. **Break loculi** with forceps/finger sweep; **Eṣanā** (probing) as needed to find tracts; if egress poor, create **dependent counter-incision** along tract's **gati**:
“एकेन वा ब्रणेनाशुद्धयमाने ... अपरान् ब्रणान् कुयोत् ... यतो यतो गतिं ... तत्र तत्र ...” — *Su. Su. 5/11-12*
6. **Irrigation & suction** (yantra-karmāṇi: **prakṣālana, cūṣāṇa** — *Su. Su. 7/17*).
7. **Aim for nirāśraya** cavity (**no pockets**; 5/8-9); place drain if indicated.
8. **Dressing** with padding/pressure (**piḍana, bandhana** — 7/17).
9. **Antibiotics/analgesia** as per protocol; follow-up for drain removal and delayed closure if needed.

Pitfalls to avoid

- **Opening unripe abscess** (violates 5/7).
- **Forgetting dependent outlet** (retained pocket—contradicts 5/11-12).
- **Wrong incision line at sensitive sites** → pain, delayed healing, **māṁsakandī** (5/15).

DEMONSTRATION 3 — Lekhana (Scraping/Surgical Shaving)

Indications (state with verse)

Quote **Su. Su. 25/9**: **rohiṇī** (4 types), **kilāsa**, **upajihvikā/adhijihvikā**, **medoja granthi/vartma**, **danta-vaidarbha**, **arśa**, **maṇḍala**, **māṁsa-kandi/māṁs-unnati**—conditions where **raised/obstructive tissue** must be **thinned/planed** rather than excised.

Step-by-step (say-do)

1. **Select lesion** (e.g., superficial plaques, exuberant granulation, small keloidal rim where scraping is preferred).
2. **Mark safe margins; avoid marma/sirā** (5/7).
3. **Anaesthesia** (local infiltration/topical where appropriate).
4. **Scraping** with curette/dermatome/skin knife: light, even strokes to level the prominence; protect surrounding skin with skin hooks/retractors.
5. **Hemostasis**: pressure; consider **skandana** (cold) or approved topical hemostats (modern parallel to **pācana** ladder — *Su. Su. 14/39-42*).
6. **Irrigate & mop** (**prakṣālana, pramārjana** — 7/17); ensure **smooth, even edges** (toward **sama, suvibhakta**—5/8-9).
7. **Dressing** (non-adherent) and aftercare; counsel on recurrence/adjunct therapy.

Pitfalls

- **Over-scraping** into healthy tissue (**atirikta**, 25/30).
- **Uneven surface** causing poor healing (contrary to **sama/suvibhakta**, 5/8-9).

Canonical anchors you must quote in viva

Aṣṭāvidha-śastrakarma (chapter opening):

अथातोऽस्त्रविधशस्त्रकर्म्यमध्यायं व्याख्यास्यामः । यथोवाच भगवान् धन्वन्तरिः ॥१॥ — Su. Su. 25/1

Chedya (to be excised):

छेद्या भगव्नरा यन्त्यः श्लैष्मिकस्तिलकालकः ।
व्रणवत्मार्बुदान्यर्शश्चर्मकीलोऽस्थिमांसगम् ॥३॥
शल्यं जतुमणिमांससंधातो गलशुणिडका ।
स्नायुमांससिराकोथो वल्मीकं शतपोनकः ॥४॥
अध्वृष्णश्चोपदशाश्च मांसकन्द्यधिमांसकः ॥ — Su. Su. 25/3-4

Bhedya (to be opened/incised):

भेद्या विद्वधयोऽन्यत्र सर्वजान् ग्रन्थयस्त्रयः ॥५॥
आदितो ये विसर्पश्च वृद्धयः सविदारिकाः ।
प्रमेहपिण्डकाः शोफः स्तनरोगोऽवमन्धकः ॥६॥
कुम्भीकाऽनुशयी नाडथो वृन्दौ पुष्करिकाऽलजी ।
प्रायशः क्षुद्रोगाश्च पुष्पुटौ तालुदन्तजौ ॥७॥
तुण्डिकरी गिलायुश्च पूर्वं ये च प्रणाकिणः ।
वस्तिस्तथाऽश्मरीहतोर्मेदोजा ये च केचन ॥८॥ — Su. Su. 25/5-8

Lekhya (to be scraped):

लेख्याश्चतस्त्रो रोहिण्यः किलासमुजिह्विका ।
मेदोजो दन्तवैदर्भो ग्रन्थिवर्तमाधिजिह्विका ॥९॥
अशांसि मण्डलं मांसकन्दी मांसोन्नातिस्तथा ॥ — Su. Su. 25/9

Timing, safety, stroke (for opening):

... मर्मसिरास्नायुसन्ध्यस्थिधमन्यः परिहरन्,
अनुलोमं शस्त्रं निदध्याद् आपूर्यदर्शनात्, सकृदेवापहोरेच्छस्त्रम् ... — Su. Su. 5/7

Incision geometry by site:

... तिर्यक्ष्येद उक्तः ॥१३॥ (brow-cheek-temple-forehead-eyelid-lip-gum-axilla-abdomen-groin)
चन्द्रमण्डलवच्छेदान् पाणिपादेषु कारयेत् ॥१४॥
अर्धचन्द्रकृतीश्चापि गुदे मेद्रे च बुद्धिमान् ॥१५॥
अन्यथा तु सिरास्नायुच्छेदनमति मात्रं वेदना,
चिराद्विषयोहो मांसकन्दीप्रादुर्भाविश्चेति ॥१५॥ — Su. Su. 5/13-15

Ideal operative wound (vraṇa-guṇa):

तत्र आयतो विशालः समः सुविभक्तो निराश्रय... ॥८-९॥ — Su. Su. 5/8-9

Foreign-matter clearance before closure:

पांशुरोमनखादीनि चलमस्थि भवेच्च यत् ...
... तस्मादेतान् विशोधयेत् ॥ — Su. Su. 25/18-19

General operative errors (avoid):

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

Unskilled injury near marma (warning):

... मूर्खप्रयुक्तं पुरुषं क्षणेन प्राणैर्वियुज्यात् ॥ — Su. Su. 25/33

Yantra-karmāṇi that assist you (suction, irrigation, pressure, dressing):

... पीडन... मार्गविशोधन... चूषण... प्रक्षालन... प्रमार्जनानि चतुर्विशतिः || — Su. Su. 7/17

Universal setup for all three demonstrations (patient or simulator)

- Consent & verification:** identity, site, procedure, allergies; explain benefits/risks; written consent.
- OT/skills lab readiness:** sterile tray, correct blades (#10, #11, #15), forceps (toothed/atraumatic), scissors, needle holder, sutures (nylon/prolene for skin; Vicryl/Monocryl for SC), curettes/dermatome (for Lekhana), suction & irrigation set, hemostatic agents, drains, dressings.
- Asepsis:** hand wash, gown, gloves, drape.
- Anaesthesia:** local infiltration (lignocaine with or without adrenaline as appropriate), or field block; analgesia plan.
- Marking:** plan incision **by site-specific geometry** (Su. Su. 5/13-15).
- Timeout:** team brief; instruments count.

Simulation stations (how to practise before touching patients)

- Chedana pad:** silicone/foam skin with embedded “lesion”; practise elliptical excision along **tiryak** lines; suture with **simple interrupted** and **subcuticular**.
- Bhedana tower:** fluid-filled multiloculated model (balloon-in-balloon or gel); identify **dependent point**, perform **#11 stab**, break loculi, **counter-opening** per tract (5/11-12), irrigate, place drain.
- Lekhana tile:** layered wax/gel plaque; level with curette to a **uniform plane**, achieving **sama, suvibhakta** edges (5/8-9).

Instrument map (classical sense → modern tray)

Step	Classical cue	Modern instruments
Entry cut	Śastra selection & site geometry (5/13-15)	Scalpel #10/#15 (skin), #11 (stab)
Excision	Chedana doctrine (25/3-4)	Toothed/Atraumatic forceps, Metzenbaum, bipolar/ligatures
Drainage	Visrāvāṇa with yantra-karmāṇi (7/17)	Suction tip, irrigation syringe, hemostat, corrugated/closed drain
Scraping	Lekhana indications (25/9)	Ring curette, skin knife/dermatome
Closure	Sīvana prerequisites (5/8-9; 25/18-19)	Needle holder, Nylon/Prolene (skin), Vicryl/Monocryl (SC)
Dressing	Pīḍana, Bandhana (7/17)	Non-adherent pad, gauze, crepe/bandage

Post-procedure orders (write these verbatim when asked)

- Analgesia:** paracetamol ± NSAID (if suitable); escalate if needed.
- Antibiotic** (I&D cases): per local policy.
- Dressing care:** keep dry for 24-48 h; elevate if limb; red flags: fever, spreading redness, discharge, uncontrolled pain.
- Suture removal:** face 5-7 d; scalp 7-10 d; trunk/limb 10-14 d (modify by tension/vascularity).
- Follow-up:** review for drain removal (I&D), histopathology (excision), recurrence (scraping).

Frequent errors & how to avoid (quote-ready)

- **Wrong timing** (opening unripe abscess) → violates “आपूर्यदर्शनात्” (5/7).
- **Wrong line/shape** → **sirā/snāyu** injury, pain, delayed healing, **māṃsakandī** (5/15).
- **Hīna/Atirkta** (too little/too much) → **vyāpada** (25/30).
- **No cleansing** before closure → suppuration (25/18-19).
- **Marma injury** by careless dissection → grave risk (25/33).

Rapid recap (30 seconds you can say at viva)

“**Chedana** for lesions listed in *Su. Su.* 25/3-4, along site-specific lines (5/13-15), then **śodhana** and **Sīvana** when **vraṇa-guṇa** met (5/8-9; 25/18-19).

Bhedana for **bhedyā** lesions (25/5-8) **only when pakva** (5/7), with **dependent counter-opening** if required (5/11-12), **prakṣālana-cūṣāṇa** (7/17), and **nirāśraya** cavity (5/8-9).

Lekhana thins raised tissue per 25/9, with gentle scraping, hemostasis, and smooth edges.”

Assessment

A. MCQs (single best answer)

1. **Which verse** justifies a **semilunar** incision in the anal region?
a) *Su. Su. 5/13* b) *Su. Su. 5/14* c) **Su. Su. 5/15** d) *Su. Su. 25/30*
2. Opening an abscess **before** it ripens violates:
a) **Su. Su. 5/7** b) *Su. Su. 5/11-12* c) *Su. Su. 5/8-9* d) *Su. Su. 25/3*
3. **Which is not lekhyā** as per Suśruta?
a) Maṇḍala plaque b) **Bhagandara** c) Māṃsakandī d) Kilāsa
4. **Counter-incision** principle is in:
a) **Su. Su. 5/11-12** b) *Su. Su. 5/15* c) *Su. Su. 7/17* d) *Su. Su. 25/33*
5. **Foreign-matter clearance** before closure is mandated by:
a) *Su. Su. 5/7* b) **Su. Su. 25/18-19** c) *Su. Su. 25/30* d) *Su. Su. 7/17*

Answers: 1-c, 2-a, 3-b, 4-a, 5-b.

B. Short-answer questions (4-6 lines each)

1. Enumerate **chedya** lesions with *one example* each and outline a safe excision plan with **site geometry** verses.
2. Write the **bhedyā** list and explain **timing** and **dependent opening** with verses.
3. Explain **vraṇa-guṇa** and how you achieve them before **Sīvana**.
4. List **yantra-karmāṇi** you use during I&D and link each to a step you perform.
5. Define **māṃsakandī** risk and the verse that warns you about wrong geometry.

C. OSCE checklists (examiner-friendly)

Station 1 — Elliptical excision (Chedana) on skin pad (8 marks)

- Marks skin lines (**tiryak**, 5/13) ✓
- LA infiltration ✓
- Elliptical cut with correct depth, gentle traction ✓
- Hemostasis (pressure/ligature) ✓
- **Prakṣālana-pramārjana** ✓
- **Sīvana** with edge eversion; spacing consistent ✓
- Specimen labelled ✓



- Dressing & post-op advice ✓

Station 2 — Incision & drainage (Bhedana) of multiloculated abscess model (8 marks)

- Confirms “pakva” timing (5/7) ✓
- Chooses dependent site; **#11 stab** ✓
- Breaks loculi; **counter-incision** if needed (5/11-12) ✓
- Irrigates, places drain; aims **nirāśraya** (5/8-9) ✓
- Pressure dressing; follow-up plan ✓

Station 3 — Lekhana of plaque model (8 marks)

- Selects appropriate lesion (from 25/9) ✓
- Controlled scraping to even plane ✓
- Hemostasis; cleanse; protective dressing ✓
- States verse on **vraṇa-guṇa** and cosmesis ✓

Final scoring tip

In any station, **name the karma, quote one exact verse, and state the concrete action** you perform (blade/shape/timing/closure). This three-step pattern shows you can **think like Suśruta and work like a modern surgeon**.