

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

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

You will **see-do-explain** three śāstrakarmas in a safe, reproducible way. Each skill is anchored to **Suśruta Saṃhitā** 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 **Chhedana, 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 — Chhedana (Excision)

#### Indications (state with verse)

Quote **Su. Su. 25/3-4** to justify excision for **granthi, tilakalaka, charmakila, arbuda, arśa**, selected fistula-in-ano components (**bhagandara**), **māṃsa-kandī/adhimāṃsa**, 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 (**prakṣāḷana**), mop (**pramārjana**), remove debris per **25/18-19**.
7. **Assess vṛṇa-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 **māṃsakandī**, *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 **vṛddhi** (e.g., hydrocele—often puncture/vedhana or open bhedana depending on case), **nāḍī** conditions, **prameha-piḍakā**, oral/ENT pustular states, selected bladder/stone contexts.

### Timing & entry rule (quote)

“... परिहरन् ... 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 **visrāvaṇa**.
5. **Break loculi** with forceps/finger sweep; **Eṣaṇā** (probing) as needed to find tracts; if egress poor, create **dependent counter-incision** along tract's **gati**:  
“एकेन वा व्रणेनाशुध्यमाने ... अपरान् व्रणान् कुर्यात् ... यतो यतो गतिं ... तत्र तत्र ...” — *Su. Su. 5/11-12*
6. **Irrigation & suction** (yantra-karmāṇi: **prakṣālana, cūṣaṇa** — *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, **māṃsakandī** (*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, māṃsa-kandī/māṃs-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-śāstrakarma (chapter opening):

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

### Chedya (to be excised):

छेद्या भगन्दरा ग्रन्थिः श्लेष्मिकस्तिलकालकः ।  
व्रणवर्त्मावुद्दान्यशर्शचर्मकीलोऽस्थिमांसगम् ॥३॥  
शल्यं जतुमणिमांससंघातो गलशुण्डिका ।  
स्नायुमांससिराकोथो वल्मीकं शतपोनकः ॥४॥  
अध्रुषश्चोपदंशाश्च मांसकन्द्यधिमांसकः ॥ — Su. Su. 25/3-4

### Bhedya (to be opened/incised):

भेद्या विद्रवधयोऽन्यत्र सर्वजान् ग्रन्थयस्त्रयः ॥५॥  
आदितो ये विसर्पाश्च वृद्धयः सविदारिकाः ।  
प्रमेहपिडकाः शोफः स्तनरोगोऽवमन्थकः ॥६॥  
कुम्भीकाऽनुशयी नाड्यो वृन्दौ पुष्करिकाऽलजी ।  
प्रायशः क्षुद्ररोगाश्च पुष्पुटी तालुदन्तजौ ॥७॥  
तुण्डिकेरी गिलायुश्च पूर्वं ये च प्रणाकिणः ।  
बस्तिस्तथाऽश्मरीहेतोर्मेदोजा ये च केचन ॥८॥ — Su. Su. 25/5-8

### Lekhya (to be scraped):

लेख्याश्चतस्त्रो रोहिण्यः किलासमुपजिह्विका ।  
मेदोजो दन्तवैदर्भो ग्रन्थिवर्त्माधिजिह्विका ॥९॥  
अर्शांसि मण्डलं मांसकन्दी मांसोन्नतिस्तथा ॥ — Su. Su. 25/9

### Timing, safety, stroke (for opening):

... मर्मसिरास्नायुसन्ध्यस्थिधमन्यः परिहरन्,  
अनुलोमं शस्त्रं निदध्याद् आपूयदर्शनात्, सकृदेवापहरेच्छस्त्रम् ... — Su. Su. 5/7

### Incision geometry by site:

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

### Ideal operative wound (vraṇa-guṇa):

तत्र आयतो विशालः समः सुविभक्तो निराश्रयः ... ॥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 ।  
एताश्चतस्त्रोऽष्टविधे कर्मणि व्यापदः स्मृताः ॥ — Su. Su. 25/30

### Unskilled injury near marma (warning):

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



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

... पीडन... मार्गविशोधन... चूषण... प्रक्षालन... प्रमार्जनानि चतुर्विंशतिः ॥ — Su. Su. 7/17

## Universal setup for all three demonstrations (patient or simulator)

1. **Consent & verification:** identity, site, procedure, allergies; explain benefits/risks; written consent.
2. **OT/skills lab readiness:** sterile tray, correct blades (**#10, #11, #15**), forceps (toothed/attraumatic), scissors, needle holder, sutures (nylon/prolene for skin; Vicryl/Monocryl for SC), curettes/dermatome (for Lekhana), suction & irrigation set, hemostatic agents, drains, dressings.
3. **Asepsis:** hand wash, gown, gloves, drape.
4. **Anaesthesia:** local infiltration (lignocaine with or without adrenaline as appropriate), or field block; analgesia plan.
5. **Marking:** plan incision **by site-specific geometry** (Su. Su. 5/13–15).
6. **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 | <b>Śastra</b> selection & site geometry (5/13–15)  | <b>Scalpel #10/#15</b> (skin), <b>#11</b> (stab)                        |
| Excision  | <b>Chedana</b> doctrine (25/3–4)                   | Toothed/Atraumatic forceps, Metzenbaum, bipolar/ligatures               |
| Drainage  | <b>Visrāvaṇa</b> with <b>yantra-karmāṇi</b> (7/17) | Suction tip, irrigation syringe, hemostat, corrugated/closed drain      |
| Scraping  | <b>Lekhana</b> indications (25/9)                  | Ring curette, skin knife/dermatome                                      |
| Closure   | <b>Sivana</b> prerequisites (5/8–9; 25/18–19)      | Needle holder, <b>Nylon/Prolene</b> (skin), <b>Vicryl/Monocryl</b> (SC) |
| Dressing  | <b>Piḍana, Bandhana</b> (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 “आपूयदर्शनात्” (5/7).
- **Wrong line/shape** → **sirā/snāyu** injury, pain, delayed healing, **māṃsakandī** (5/15).
- **Hīna/Atirikta** (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 **Sivana** when **vraṇa-guṇa** met (5/8–9; 25/18–19).

**Bhedana** for **bhedya** lesions (25/5–8) **only when pakva** (5/7), with **dependent counter-opening** if required (5/11–12), **prakṣālana-cūṣaṇa** (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 **bhedya** list and explain **timing** and **dependent opening** with verses.
3. Explain **vraṇa-guṇa** and how you achieve them before **Sivana**.
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-pramāṛjana** ✓
- **Sivana** 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**.