THE STUDY VAULT

Clinical Chaos

Escharotomy

SKILL SNAPSHOT

Purpose
- Surgically releases constricting full-thickness burn eschar to restore distal perfusion or chest-wall ventilation.

When to use
- Progressive vascular compromise in a circumferential extremity burn or restricted ventilation from circumferential chest/abdominal eschar.

Supplies needed
- Sterile procedure set/electrocautery; analgesia/sedation; hemostatic supplies; Doppler; monitor; dressings; burn resuscitation equipment.

PREP + PATIENT SETUP

- Notify burn/trauma surgeon immediately and continue ABC/burn resuscitation.
- Document serial pulses/Doppler, cap refill, temperature, sensation, movement, pain, pressures, ventilation, and chest excursion.

VAULT TIP

- The endpoint is functional: improved perfusion or ventilation—not simply completing an incision.

STEP-BY-STEP

1. Hand hygiene/PPE; identify patient; explain emergency procedure when possible.
2. Place patient on continuous ECG, BP, SpO2, and respiratory monitoring; obtain IV access and emergency equipment.
3. Expose entire burned segment and establish sterile field; mark safe longitudinal release lines away from major nerves/vessels.
4. Assist qualified provider with incision through eschar to subcutaneous fat along prescribed medial/lateral lines.
5. Expect wound edges to separate as constriction releases; control bleeding with cautery/hemostatic measures.
6. For extremity release, reassess pulse/Doppler, cap refill, color, warmth, sensation, movement, pain, and compartment tension immediately.
7. For chest release, reassess chest excursion, airway pressures, tidal volumes, SpO2, and ventilation.
8. If perfusion/ventilation remains inadequate, notify surgeon; extension, additional incision, or fasciotomy may be required.
9. Apply ordered topical antimicrobial/nonadherent dressing to open incisions.
10. Elevate extremity if ordered while maintaining perfusion and protecting lines.
11. Continue frequent neurovascular/respiratory assessments and burn fluid/temperature management.
12. Monitor for hemorrhage, infection, nerve/vessel injury, recurrent constriction, and compartment syndrome.

SAFETY REMINDERS

- This is a surgical procedure by qualified clinicians.
- Do not delay for absent pulses or worsening ventilation.
- Bleeding can be significant despite insensate eschar.
- Escharotomy does not release deep fascia.

COMMON MISTAKES

- Waiting for complete pulse loss.
- Inadequate incision depth/length.
- No immediate reassessment.
- Assuming eschar is painless throughout.

DOCUMENTATION

- Indication and pre/post findings.
- Incision locations/time/provider.
- Analgesia/sedation and bleeding.
- Perfusion/ventilation response.
- Dressings, complications, notifications.