EARLY EXCISION AND GRAFTING FOR LARGE BURNS (>20%)

EXECUTIVE SUMMARY

- Patients with large burns (>20%), unless superficial partial thickness, should be excised within 72 hours of injury
- Contraindications to early excision will be discussed between the TBICU and Burn attendings
- Patients will receive adequate postoperative fluid resuscitation based on fluid resuscitation protocol

BACKGROUND

Early excision is a well-accepted practice and supported historically by several cohort studies and meta analyses demonstrating reduced wound infection, length of stay, hypertrophic scarring, and mortality [1, 2, 3]. It has also been shown to reduce burn-related myocardial inflammation and immunosuppressive effects of burn inflammation [4, 5]. While the exact timing of early excision varies throughout these studies, a recent large, propensity matched registry study verified the advantage of early excision within 3 days of injury, showing reduced wound infection and mortality compared to 4-7 or 7-14 days [6]. Additionally, ultra-early excision (within 24-48 hours) has shown reduced infection, hospital length of stay, and mortality compared to excision between 48-72 hours and should be considered when feasible [7].

CONTRAINDICATIONS FOR EARLY EXCISION AND GRAFTING

Few contraindications exist to early excision and grafting. Trauma/Burn ICU attending and Burn attending will determine together if the patient is not stable for early excision.

SUBSEQUENT EXCISIONS

Subsequent excisions are performed every 48-86 hours pending post-excision resuscitation and medical stability. The patient will be scheduled for excision and the Burn team will collaborate with the Trauma Burn ICU team to ensure readiness for OR on operative date.

GOALS FOR EARLY EXCISION

- Complete excision (>95%) of all full-thickness burns within 10 days
- All full-thickness (?excised) burns treated with skin grafting or skin substitute

POST EXCISION RESUSCITATION

If first excision falls within the initial 48-hr resuscitation window, formal resuscitation will be continued along with the standard protocol for at least 12 hours after first excision. If it falls outside the first 48 hours, resuscitation, resuscitation protocol is resumed. In either case, the burn team sets the initial postoperative fluid rate, which can be titrated up or down based on the resuscitation protocol. See full burn fluid resuscitation protocol for further details. Subsequent excisions will not require post-excision resuscitation.

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