ACUTE OR INTERMEDIATE PHASE OF BURN CARE

The acute or intermediate phase of burn care follows the emergent/ resuscitative phase and begins 48 to 72 hours after the burn injury.

**During this phase, attention is directed toward:**

* Continued assessment and maintenance of respiratory and circulatory status.
* Fluid and electrolyte balance, and gastrointestinal function.
* Infection prevention, burn wound care (ie, wound cleaning, topical antibacterial therapy, wound dressing, dressing changes, wound débridement, and wound grafting).
* pain management.
* nutritional support.

Infection Prevention

Despite aseptic precautions and the use of topical antimicrobial agents, the burn wound is an excellent medium for bacterial growth.

Infection control is a major role of the burn team in providing appropriate burn wound care. Cap, gown, mask, and gloves are worn while caring for the patient with open burn wounds. Clean technique is used when caring directly for burn wounds.

Systemic antibiotics are administered

Several parenteral antimicrobial agents may be given together to treat the infection

Wound Cleaning

Various measures are used to clean the burn wound. Hydrotherapy in the form of shower carts, individual showers, and bed baths can be used to clean the wounds.

The temperature of the water is maintained at 37.8°C (100°F), and the temperature of the room should be maintained between 26.6° and 29.4°C

At the time of wound cleaning, all skin is inspected for any hints of redness, breakdown, or local infection.

When nonviable loose skin is removed, aseptic conditions must be established.

Wound cleaning is usually performed at least daily

After the burn wounds are cleaned, they are gently patted with towels

the patient is assessed for signs of chilling, fatigue, changes in hemodynamic status, and pain unrelieved by analgesic medications or relaxation techniques.

Topical Antibacterial Therapy

Topical antibacterial therapy does not sterilize the burn wound; it simply reduces the number of bacteria so that the overall microbial population can be controlled by the body’s host defense mechanisms. Topical therapy promotes conversion of the open, dirty wound to a closed, clean one.

The three most commonly used topical agents are silver sulfadiazine (Silvadene), silver nitrate, and mafenide acetate (Sulfamylon).

Wound Dressing

When the wound is clean, the burned areas are patted dry and the prescribed topical agent is applied; the wound is then covered with several layers of dressings. A light dressing is used over joint areas to allow for motion (unless the particular area has a graft and motion is contraindicated). A light dressing is also applied over areas for which a splint has been designed to conform to the body contour for proper positioning. Circumferential dressings should be applied distally to proximally. If the hand or foot is burned, the fingers and toes should be wrapped individually to promote adequate healing.

Dressing Changes

Dressings are changed in the patient’s unit, hydrotherapy room, or treatment area approximately 20 minutes after an analgesic agent is administered.

They may also be changed in the operating room after the patient is anesthetized.

A mask, goggles, hair cover, disposable plastic apron or cover gown, and gloves are worn by health care personnel when removing the dressings.

The outer dressings are slit with blunt scissors, and the soiled dressings are removed and disposed of in accordance with established procedures for contaminated materials.

Dressings that adhere to the wound can be removed more comfortably if they are moistened with tap water or if the patient is allowed to soak for a few moments in the tub.

The remaining dressings are carefully and gently removed.

The patient may participate in removing the dressings, providing some degree of control over this painful procedure.

The wounds are then cleaned and débrided to remove debris, any remaining topical agent, exudate, and dead skin.

Sterile scissors and forceps may be used to trim loose eschar and encourage separation of devitalized skin

the wound and surrounding skin are carefully inspected. The color, odor, size, exudate, signs of re-epithelialization, and other characteristics of the wound and the eschar and any changes from the previous dressing change are noted.

Pain Management

It is titrated to obtain pain relief based on the patient’s self-report of pain using a standardized pain rating scale.

Opioid administration via the intravenous (IV) route.

Morphine sulfate.

Fentanyl.

Patient-controlled analgesia (PCA).

The use of nonpharmacologic measures has also proven effective in the management of burn pain.

Nutritional Support

The most important of these interventions is to provide adequate nutrition and calories to decrease catabolism. Nutritional support with optimized protein intake can decrease protein losses