

FIGURE I
RULE OF NINES

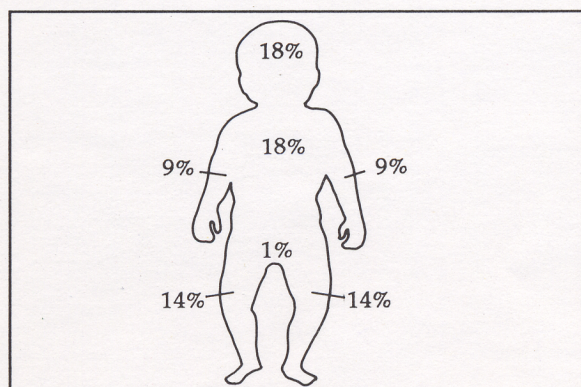


FIGURE II
INFANT RULE OF NINES

Burn Injuries

Burn injuries are caused by a variety of agents - hot liquids, flame, flash (i.e., explosions), chemicals, electricity, and contact with hot objects.

The most common cause of burn injuries are scalds or hot liquids and the most common location for burn injuries to occur is the home. Flame accounts for the second highest incidence of burn injuries. Burn injuries caused by flames are usually more extensive and deeper than those caused by scalds.

The most important classification of burn wounds is the extent and depth of the injury. In most cases the extent and depth of the burn wound are the most significant factors contributing to the seriousness of injury of the burn patient.

Extent of Injury

The extent of a burn wound is defined as the percentage of total body surface damaged and is determined by the use of diagrams designed for this purpose. One of the most commonly used methods for estimating the extent of burn injury is the Rule of Nines. The Rule of Nines divides the body into areas of 9% or multiples of 9's (Figure I) and is modified for estimating the extent of burn injury in children (Figure II).

Depth of Injury

The depth of a burn injury refers to the amount of skin, and on some occasions other tissue, injured. Skin has two layers, the superficial epidermis and the deeper dermis that overlies subcutaneous tissue.

Burn injuries are defined as partial full thickness in depth, depending upon the amount of skin damaged or destroyed. Partial thickness injuries are further divided into superficial,

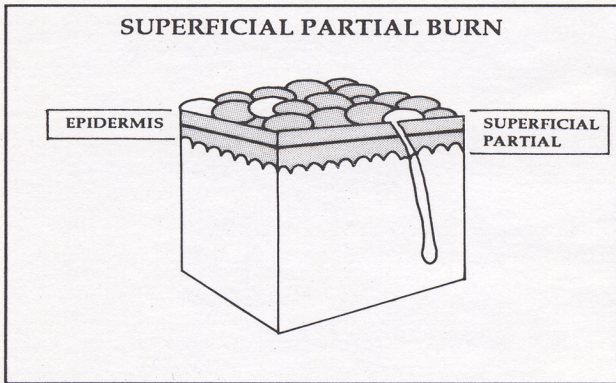


FIGURE III

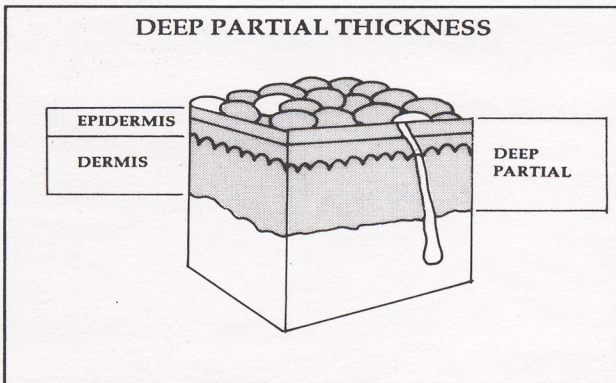


FIGURE IV

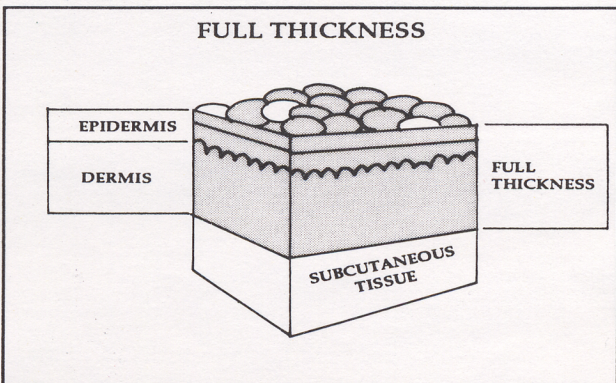


FIGURE V

intermediate, and deep partial depending upon the amount of the skin which is damaged. Full thickness refers to an injury of all the skin and into the subcutaneous tissue or deeper.

A superficial partial thickness burn destroys the epidermis and upper layer of the dermis (Figure III). The wounds are usually red in appearance and referred to as first degree burns.

Intermediate partial thickness wounds destroy the epidermis and the mid portion of the dermis. They are often characterized by blisters.

Deep partial thickness wounds extend to the lower portions of the dermis (Figure IV). These wounds are usually marbly white in appearance. Intermediate and deep partial thickness are called second degree.

Full thickness wounds (Figure V) extend through the entire dermis. They are characterized by leathery, dry appearance, with the edges depressed from the unburned areas. These injuries are referred to as third degree burns.

Regardless of the cause, extent, or depth of a burn injury the immediate or first aid treatment is the same: stop the burning and seek medical care as soon as possible!