## Burn injury descriptors

**Severity of burns -** And there are different degrees of burns, such as first, second, third and fourth degree burns. The severity of a burn is related to the length of contact time with the burn source, the temperature, the type of material conducting heat, the size of the burned surface area and the region of the body where exposure took place.

**First degree** - First degree burns involve redness and sensitivity at the sight the burn was sustained immediately after brief contact with a burn agent. This degree of burn heals within approximately seven days. It is expected to heal without complications. Pain may be an issue depending on the amount of surface area. The red skin should blanch. It may swell to a limited degree and is expected to have some degree of flaking during the healing process. It is considered a superficial burn. However, if one sustains first degree burns associated with excessive heat conditions, hospitalization may be necessary depending on the mechanism of injury. There will be no weeping or drainage from the burned areas.

**Second degree** - Second degree burns generally involve redness, blisters and pain. Second degree burns may cause scarring and infection to occur. It is deeper than first degree burns. Weeping from the burned areas is characteristic of second degree burns. Certainly pain may be an issue. This degree of burn injury may take up to six weeks to heal. The temperature of the injury site may vary. The color may be red and mottled. Generally this degree of burn results from scalding or flash burns, depending on the length of exposure to the burn source.

**Third degree** - Third degree burns are evident when the burn injury is deeper than the skin, muscle and bone may be involved. Third degree

1

burns will leave scars. The skin is charred, white or leathery. There is no blanching. A burn of this degree is indicative of lengthy exposure to the burn source. Skin grafts and other surgical procedures will be necessary to facilitate healing because there is no spontaneous regeneration from the destroyed tissue. Wound management to reduce contractures is necessary. Some pain may or may not be present. This degree of burn usually results from flame, chemical or electrical burns.

**Fourth degree**. Fourth degree burns are indicative of lengthy exposure to the burn source, such as electrical, chemical or flames. Deep structures are adversely affected and generally exposed. Amputation or multiple fasciotomies are needed to facilitate recovery. Skin grafts and other surgical procedures will be necessary to facilitate healing because there is no quality spontaneous regeneration from the destroyed tissue. Wound management to reduce contractures is necessary. Deformities are severe and require long term management.

**Partial-thickness burns** - Superficial partial-thickness: May be superficial partial-thickness or deep partial-thickness and therefore are generally regarded as second degree burns. The superficial partial-thickness burns involve the most superficial half of the dermis. Superficial partial-thickness burns may weep exudates and be moist in character.

**Deep partial-thickness** - The deep partial-thickness burns involve the deeper half of the dermis. Deep partial-thickness burns are generally dry in character. These injuries take any where from three to six weeks to heal.

**Full-thickness burns** - May be third degree or fourth degree burns. Skin, muscle and bones are involved in full-thickness burns. Generally, the entire dermis and fat layers are involved.