

a change of face

Recovering from and living
with burn injuries

Whether from a cooking mishap or too much time in the sun, most everyone has experienced the unrelenting pain of a burn. But there are those who have experienced the horror of burn trauma beyond anything imaginable.

For those victims, months and sometimes years of surgeries, physical therapy and emotional struggles can be a way of life. And, unlike many other trauma victims, burn victims wear their scars of trauma for the world to see.

But as critical care nurse Barbara Ward, MSN, R.N., CCRN, of Johns Hopkins Bayview Medical Center Burn Clinic in Baltimore, Md., will tell you, "They are not victims, they are survivors."

With survival, however, comes the need for support and information to cope with the emotional, mental and spiritual issues that remain with the physical scars. From enduring treatment to transitioning back into day-to-day life, there are many things burn survivors and their families need to know about recovering from and living with burn injuries.

Different Degrees

The skin is the body's largest organ. It protects us from infection while limiting the loss of essential fluids. But when a burn occurs, the survivor is faced with potentially life-threatening conditions because of the body's exposure. So it is necessary to understand the severity of a burn to understand one's recovery needs.

A first-degree burn involves the epidermis—the top layer of skin. “These are nonblistering sunburns,” Barbara explains. “First-degree burns are superficial and the body can quickly heal itself by creating new, healthy cells.”

Second-degree burns involve the epidermis and the second layer of skin called the dermis, which contains blood and lymph vessels, hair follicles, and oil and sweat glands.

“Second-degree burns can range from the superficial, like blistering sunburns, to those that are deeper,” Barbara says. This type of burn is treated up to twice a day with an antiseptic solution and dressed with medicated creams.

Third-degree burns involve all layers of the skin and are often referred to as full-thickness burns. “These burns create dead tissue and destroy nerve endings,” Barbara says. “For third-degree burns, skin grafts are needed to replace the damaged skin.”

Fourth-degree burns involve the damage of bone and muscle. This type of burn is rare and often requires amputation and skin grafts. Fourth-degree burns are often fatal.

A Treatment Plan

The goal of burn trauma treatment is to heal the burn(s), which in many cases can mean the difference between life and death.

“It is very important for people who suffer from burns to get to a burn center,” Barbara emphasizes. “Burn centers offer an interdisciplinary approach to burn care that may or may not be available in other treatment facilities or hospitals.”

And, as soon as the burn survivor reaches the burn unit, treatment begins.

“During the first 24 to 72 hours, a burn survivor receives aggressive treatment to stabilize his or her vital functions and to assess the burns,” Barbara explains.

A burn injury is assessed by the size and depth of the wound(s) in comparison to the entire body.



“Initially it is difficult to see everything, so the wounds need to be cleaned,” Barbara says. “The patient ‘takes a bath’ in order for the burns to be properly seen and assessed. Some skin may be irreparably damaged, which means the body rejects the skin, and it needs to be removed.” In this instance, surgery occurs immediately.

For some second-degree burns and all third-degree burns, skin grafting is the next crucial step in treatment. For a skin-grafting procedure, unburned skin from the survivor's body is removed and attached to the area destroyed by the burn. When the procedure takes place depends on the size of the burn area.

If the burn is over a large portion of the body, less unburned skin is available for the graft. The procedure also increases the injury area. For example, a burn of 30 percent of the body would require 30 percent of unburned skin to graft, creating a 60 percent area of injury. In this case, a graft is done on a small section and then allowed to heal. Then other small sections are done until all of the injury area is grafted.

Once a graft becomes secure, exercise programs, tub baths and other activities resume.

“Occupational and physical therapy enter into recovery as quickly as anything else,” Barbara explains. “They are vital in rehabilitation as they help manage swelling, encourage the burn to heal and promote range of motion.”

In addition to these therapies, nutrition plays an important role in recovery because wound healing is aided by adequate calories, fluids, protein, vitamins and minerals. If any of these are lacking, supplementation may be needed. A nutritionist on the burn team can address an individual's caloric and nutritional needs.

Understandably, pain control also is a great concern. Both burns themselves and the regimens required to treat them can be very painful.

“Burn survivors often experience huge adrenaline rushes,” Barbara says. “We must be liberal with our use of pain control and anti-anxiety medications to ensure the patients' comfort.”

The average length of stay in a burn unit varies considerably depending upon the size and degree of the burn. While the average length of stay in burn units has decreased over time due to medical advances, Barbara says, “the general rule is that every 1 percent

of the body burned equals a day in the hospital. But other factors such as age and general health are involved.”

And it is important to know that, for a burn survivor, treatment is not just about medicine, surgery and physical therapy. Emotional and mental recovery are just as important.

The Psychological Aspect of Recovery

Burn traumas, more than most any other physical trauma, have a significant impact on the survivor's emotional, mental and spiritual well-being.

“Surprisingly, many burn survivors arrive aware and conversant,” Barbara explains. “However, this can change quickly as the body responds to the burn and the survivor goes into shock.”

As a result, the person may have little or no knowledge or understanding of the situation. In fact, Barbara says, “A lot of people do not even remember the event itself. They wake up later to realize what has happened.”

Sharon Lauterbach, B.S., R.N., of the Burn Acute Care/Pediatric Burn Unit at Parkland Memorial Hospital in Dallas, Texas, says, “Family members have to [emotionally] deal with things immediately.”

Their reactions may include shock, despair and fear that their loved one might die. And because many burns are painful, they may be concerned about the extent of suffering their loved one is enduring.

“By the time a survivor becomes aware of what has happened, the family has had some time to deal with it,” Sharon says. “The survivor starts where the family has already been.”

Even after the survivor has had time to accept his or her injuries, the psychological aspect of recovery is long and survivors often experience setbacks.

“A unique relationship develops between staff and survivor,” Barbara says. “The victim is surrounded by people who are used to looking at and caring for burns. So a burn unit becomes a safe haven.”

“For many people, going home means facing the reality of their burns for the first time,” Sharon says. “Burn injuries

can change or disfigure the body and face. And because our society places so much emphasis on physical beauty, some survivors are afraid to go out in public.”

And it is not just the loss of their once-familiar physical appearance. Life is redirected after a burn trauma—for both the burn survivor and their loved ones. Burn injuries have the power to change appearances, functioning and identities.

“They may lose their job,” says social worker Kay Garten, LMSW, of the Burn Acute Care/Pediatric Burn Unit at Parkland Memorial Hospital. “Where they once made a good living, they are now making \$1,200 a month on disability.”

“If they require extensive outpatient treatment, survivors also may feel they've lost their ability to function independently,” she continues. “Family and friends are also profoundly affected by the injury. Psychosocial stressors are as prevalent for the families as they are for the survivors. They also grieve, not only for the burn victim's losses, but also for the losses they suffer as a result.”

It is important that the burn survivor and his or her loved ones grieve these losses. And, because grief is a personal experience, a loss to one person may not be considered a loss to another. Adjustment to the losses hinges upon many factors, including the coping style of the individual, the quality of the survivor's support system, the nature of the trauma, the damage the trauma caused and the presence of additional stressors.

“There is a great deal of pain involved with burns, both physical and psychological,” Kay says. “Most survivors, however, find a reserve to push themselves to get through it.”

From Victim to Survivor

Recovering from and learning to live with a burn injury can be extremely difficult. But with a good medical team, a lot of hard work, a positive attitude and a good support system, burn survivors can go on to lead happy and productive lives.

“With burn trauma comes an opportunity to change, for better or for worse,” Barbara says of the burn survivors she has worked with. “I am always amazed at the amount of resilience I see in burn survivors, despite everything they've been through.”

Tips on how to help a person with a serious burn injury

- Be a good listener, but don't pry if they don't want to talk about the injury.
- Be positive without minimizing the seriousness of the injury.
- Don't say, “I know how you feel” if you haven't been through a similar experience.
- Don't stare, but do make eye contact.
- Help by doing chores, bringing food to the family or providing childcare.
- Ask how the person is doing even several months after he or she has returned home.



Resources for Burn Survivors and Family Members

- Alisa Ann Ruch Burn Foundation www.aarbf.org
- Burn Institute www.burninstitute.org
- Burn Survivor Resource Center www.burnsurvivor.com
- Burn Survivors Throughout the World www.burnsurvivorsttw.org
- Burn Survivor USA www.burnsurvivorusa.com
- The Phoenix Society for Burn Survivors www.phoenix-society.org