

## Understanding Burns

Burn injuries can occur in medical malpractice, personal injury and products liability cases, so we thought it is important for attorneys to understand more about burns and burn care.

### Classification

Burns are described as 1<sup>st</sup> degree, 2<sup>nd</sup> degree or 3<sup>rd</sup> degree. First-degree burns are the most superficial. They affect only the top layer of skin (epidermis). Second-degree burns extend into the middle layer of skin (dermis). Third-degree burns involve all three layers of skin (epidermis, dermis, and fat layer), usually destroying the sweat glands, hair follicles, and nerve endings as well.



Burns are further classified as minor, moderate or severe. The severity determines how they are predicted to heal and whether complications are likely. Doctors determine the severity of the burn by estimating the percentage of the body surface that has been burned. Special diagrams are used to show what percentage of the body surface is compromised.

All first-degree burns as well as second-degree burns that involve less than about 10% of the body surface usually are classified as minor. A third-degree burn may be classified as minor if it involves less than 5% of the body surface, unless it involves the face, hands, feet, or genitals. Burns involving these areas or involving deeper layers of skin over larger areas of the body are classified as moderate or, more often, as severe. These types of burns require a burn center consult or referral.

### Symptoms

First degree burns are red, moist, swollen, and painful. The burned area whitens (blanches) when lightly touched but does not develop blisters.

Second degree burns are red, tender, swollen and have fluid filled blisters. The redness is a good sign because it means that there is still some blood supply to the tissues. White tissue is seen in 3<sup>rd</sup> degree burns because the blood vessels have been seared shut. This will lead to tissue death. Third degree burns can also appear as charred or charcoal grey,

tough and/or leathery. There is no sensation in a third degree burn but the outside of the burn will be a 2<sup>nd</sup> degree burn and therefore very painful.

Burns are progressive in nature and for this reason require follow up within 24-72 hours to reevaluate.

### Effects of Burn Injury

When a moderate to severe burn occurs there is increased permeability of blood vessels (fluid leaking out into third space), causing swelling and a decrease in circulating blood volume, leading to dehydration and hypovolemic shock, decreased perfusion to vital organs, increased peripheral vascular resistance, decreased cardiac output and a falsely elevated hematocrit. Because of this, burn patients require massive amounts of IV fluids.

### Other Complications

Destruction of muscle tissue (rhabdomyolysis) occurs in deep third-degree burns. The muscle tissue releases myoglobin, one of the muscle's proteins, into the blood. If present in high concentrations, myoglobin can cause acute renal failure. Rhabdomyolysis can be diagnosed from blood and urine tests.

Thick, crusty surfaces (eschars) are produced by deep third-degree burns. Eschars can become too tight, cutting off blood supply to healthy tissues or if on the chest, constricting expansion of the chest and lungs, leading to impaired breathing. When this occurs an escharotomy is required, which involves making an incision into the tissue to allow for swelling or lung expansion. This procedure can be done at the bedside.

### Treatment

The focus in the first 12-24 hours is on fluid replacement. After this time the focus changes to cleaning the wounds to prevent infection, inflammation and promote healing. Removal of burned tissue with skin grafting is done as early as possible to decrease the amount of pain (because nerve endings are covered), decrease the risk of infection, decrease the hypermetabolic state, decrease the amount of complications, decrease scarring, speed recovery and obtain a better cosmetic appearance. These patients have undergone as much psychological trauma as they have physical trauma and need help with coping and adjusting to their new circumstances.

*Source: www.medlineplus.com and 2005 AALNC conference. ◆*

## Pain & Suffering Reports Revisited

*Below is an excerpt from an article that appeared in an electronic magazine published by the Vicki Milazzo Institute (formerly Medical-Legal Consulting Institute) in November 2004 that featured our services in a burn case. This client suffered 2<sup>nd</sup> and 3<sup>rd</sup> degree burns over 50% over her body.*

### “Certified Legal Nurse Consultant’s (CLNC®’s) Pain and Suffering Analysis Spurs Record Settlement

How does the attorney make sense of a year's worth of complicated medical records describing such devastating injuries as burns? How does he even begin to grasp the pain and suffering his client endured, much less make it real for a jury. For Attorney Robert Walker the answer was simple. He doesn't. He called in an expert. His expert of choice was Sharon Scott, RN, CLNC.

**The CLNC® Is the Key to Understanding the Medical Issues** – For the Adams case, Scott tapped both her 19 years of nursing experience and her extensive training as a CLNC®. "I developed a detailed chronology of the case and explained all the medical procedures in lay terms," she says. "My services included indexing the records and explaining the difference between second and third degree burns. I also pulled out every recorded instance of Adam's pain and suffering and prepared a chart listing all the pain medications, sedatives, etc., she took."

Walker explains the **value of Scott's CLNC® services**. "I had no idea what was being done to the plaintiff because much of it was in medical shorthand. Sharon indexed the records so we could find what we were looking for. Then on a daily basis she summarized Adams' condition, treatments, surgeries, medications and outcome." This detailed summary made it easier for Walker to answer defense interrogatories and to decide which witnesses to call.

"We were most concerned about Adams' pain and suffering," he continues. "We needed a handle on that. Sharon put all the procedures and surgeries into words we could understand. For example, debridement is just a medical term to me. Sharon explained that meant scrubbing off the dead skin. When you see how often they did that, you understand how much my client suffered."

Scott's next step was to make the actual amount of painkiller Adams received real for the lay person. Walker explains, "Sharon tallied all the dosages for the first six weeks of treatment, then concluded by saying my client had received enough medicine to relieve the pain of 850 heart attacks or 1,700-3,400 hours of labor. That vivid picture of what Adams went through gave us an advantage over the defense attorney when we started talking about damages."

Although the case was pending in federal court, local rules required Walker and the defense to attempt a good-faith settlement. "Both sides chose mediation," he says, "and we settled in about a day. Sharon's summary made the damages so evident, we never had to discuss them. This made for a cleaner conference focused on the liability issues."

**The result was a \$14,000,000 settlement, at that time (2000) one of the largest out-of-court settlements ever reached for a personal injury case in Virginia.** "One reason we got this settlement," Walker acknowledges, "was the understanding of the medical records Sharon gave us."

**CLNC®s Save Attorneys Time and Money** – "I have a small office," Walker says. "I can't read 4,000 pages of medical records. Having the services of someone like Sharon allows me to take on complex cases that I could not handle otherwise."

Scott's status as an independent CLNC® in private practice is an advantage for Walker. "I trust her judgment and her opinions more than I would a nurse working in my own office. If you get a case of questionable merit, Sharon will tell you not to pursue it."

Another benefit of working with a CLNC® is cost savings. "You can lose a lot of money on cases with complex medical issues if you're not on firm ground," says Walker. "My out-of-pocket expenses on the Adams case were around \$240,000. Sharon can quickly and economically identify whether you have a case, and she can cut down on your staff time going through medical records. If you're in a small or medium-sized firm and you need help indexing records or understanding complex medical issues, a CLNC® is indispensable." ♦